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EXCHANGE COLUMN ADVERTISEMENTS will appear on page 12 (bottom folio), and must be received not later than THURSDAY AT NOON, to appear in the next issue.

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**WANTED**, competent qualified Assistant. Wilkinson, Hemel Hempstead, Herts.

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**WANTED**, a Junior Assistant for a Mixed country trade. Apply J. Smith, Chemist, Llanelly.

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**WHOLESALE**.—Wanted, a Young Man to look after town orders being executed. Apply, stating age, salary required, and references, Raimes & Co., York.

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**ASSISTANT**, at once; aged 23 to 28; outdoors; no Sunday duty; references as to character and ability essential. Apply, with usual particulars, to G. R. Foulston, 46 Waterworks Street, Hull.

**YOUNG** Assistant, of steady habits; active and obliging; accustomed to dispense on general retail; no Sunday duty. Apply, giving full particulars and reference, to D. Jenkins, Chemist, Bridgend.

**WANTED**, Junior Assistant (indoor); good counterman and dispenser; Mixed Business; Protestant and abstainer preferred; unexceptionable references required; photo, to be returned. Apply, J. B., 32 Victoria Road, Widnes.

**WANTED**, an Assistant; unmarried; to sleep on premises; board out; good salesman and fully competent to dispense. Apply, giving full particulars, and state salary expected; enclose C. D. V. Kiloh & Co. (Limited), Cork.

**INVOICE** Clerk wanted for wholesale drug house in London; must be a good writer and quick at figures. Apply, stating experience and salary required, to "Gresley," care of Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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**IMMEDIATELY**; competent Assistant (indoor), about 22, in good-class retail and dispensing business; one only kept; dwelling-house apart from business. State age, salary required, and usual particulars, also when discharged, to T. Fox, Great Milver.

**IMMEDIATE**.—Qualified Assistant (indoor); good personal appearance and obliging manner; hours 8 to 10 alternate Sunday evening duty; Prescriber and Tooth Extractor. Reference as to ability, character, height, and salary, with photo, Adams, Horsey, N.

**WANTED**, at once, a Junior Assistant for a country town in North Wales; must be a good dispenser and have a knowledge of the Welsh language. Address, stating salary required and full particulars, to D. H., care of J. Thompson, 58 Hanover Street, Liverpool.

**WANTED**, a first-class Manager (qualified) for a high-class Drug Store in Town; must possess excellent references; salary to commence £100, with apartments; single man preferred. Apply to B., care of Messrs. Davy & Yates, 64 Park Street, Southwark, S.E.

**IMMEDIATELY**, in London.—A competent Assistant; must be qualified, of good appearance and address, and have a practical knowledge of surgical and mechanical dentistry. Apply, stating age, height, references, and salary required, to W. F. Bartle, Glencoe, Crescent Road, Bournemouth (West).

**IMMEDIATELY**, a Qualified Manager, of good address, for a high-class Dispensing business in the West of England; a liberal salary is offered to a gentleman of experience who seeks a permanent situation. Address reply, stating full particulars, to "Manager," care of Evans, Gadd & Co., Exeter.

**WANTED**, young man to take charge of a Chemical Apparatus Department in a wholesale drug house in Canada; must have a thorough knowledge of these goods; references as to character and ability required. Apply, stating past experience and salary expected, to "Chemical Glass," P.O. Drawer 2,050, Montreal, Canada.

**WANTED**, young Pharmaceutical Chemist as Assistant in a large Chemical factory; must have thorough practical experience in the manufacture of high-class pharmaceutical preparations, and in conducting oenological analyses; commanding salary £100 per annum. Address by letter, W. A. Y. P., care of Crossley, Moir & Co., Advertising Agents, 57 Coleman Street, E.C.

**A** COMPETENT Assistant, accustomed to a good-class Dispensing, Family, and Agricultural trade; must be a quick and accurate Dispenser; short hours; apprentices kept. Apply, with usual particulars, enclosing carte de visite, if convenient, to J. Meredith, Chemist and Wine Merchant, Brecon.

**J**UNIOR Assistant; accustomed to Dispensing and General Retail business; must be quick, active, and obliging; references must bear every investigation; comfortable home offered. Send carte, to be returned. Apply, "Cheamens," Hodgkinsons, Prestons & King, 81 Bishops-gate Street Without, E.C.

**W**ANTED at once, an Improver or Turnover Apprentice, accustomed to Dispensing and Counter, of good appearance, and possessing undeniable references; business is in healthy neighbourhood, by the sea. Apply, stating age, salary required (outdoor), and full particulars, enclosing carte, to Mackereth, Grange-over-Sands.

**I**MMEDIATELY, Assistant to Mancro Braeb; must have first-class references, both as to ability and character, be well up in Prescribing; if able to extract teeth preferred; apartments provided; salary and commission. Apply to J. Edmunds, Chemist and Surgeon-Dentist, 47 Fernhead Road, St. Peter's Park, Paddington, W.

**N**EAR Town.—Wanted, a qualified Assistant, about 25 years of age; experienced in good-class Retail and Dispensing, and competent to take sole charge in occasional absence of the principal; also a good Junior seeking a permanency. Address, with full particulars, Z. A., care of Messrs. Edwards & Sons, Queen Victoria Street, E.C.

## SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

**J**UNIOR or Dispenser to Surgeon; London; aged 21. W. H. A., 28 Chippenham Road, W.

**A**SSISTANT; good experience; compétent; aged 25. T. Cockshott, 159 Woodhouse Lane, Leeds.

**A**SSISTANT (23); good experience; disengaged; London preferred. Ferrum, 225 Marylebone Road, N.W.

**A**SSISTANT (25); good references; Manchester preferred. "Alpha," care of 24 Erskine Street, Liverpool.

**E**NERGETIC Assistant, not qualified; 20 years' experience; single; 35. "Statim," 12 Chapel Street, Uxbridge.

**A**s Dispenser to a medical gentleman by a young man (21); salary no object. Surveyor, Hinstock, Market Drayton.

**M**ANAGEMENT, with view to succession preferred; married; 32; tall. T., 113 Riversdale Road, Highbury, N.

**B**RANCH Manager or Assistant (outdoors); 16 years' good-class experience. "Statim," 10 High Street, Hornastle.

**A**SSISTANT or Branch Manager; used to prescribing and country trade; aged 33 years; married. A. O., Warrington House, Liacol.

**L**ONDON; about April 15th; time for evening lectures; aged 20; 4½ years' experience. W. H., 1 Victoria Buildings, Rushden, Northants.

**A**S Junior Clerk in London (Wholesale); 7½ years' Retail experience; disengaged 2nd April. Address "Ogilvie," 39 St. Paul's Road, Canoubury, N.

**A**SSISTANT or Assistant, with view to purchase; married; aged 27; height 5 ft. 7 in.; Minor. "Chemist," 52 Florence Street, Newcastle, Staffs.

**M**INERAL WATERS.—Situation wanted by experienced man, as Working Foreman. C. N., 2 Frederick Place, Mason Street, Lambeth, S.E.

**W**ANTED, by a respectable young man, a situation in Warehouse or Laboratory, used to Surgery work and Dispensing; aged 24; 10 years' good reference. G. T., 22 Etwell Road, Clapham, S.W.

**A**SSISTANT (25); Dispense, Prescribe, Extract; good all-round knowledge; time for lectures and study essential; low salary; disengaged at Easter. "Excelsior," 91 Crosby Street, Maryport.

**C**ONFIDENTIAL or Branch Manager; end April or early in May; qualified by examination; aged 40; married; experience and references unexceptional. "Ceto," Messrs. Bals Brothers, Wholesale Druggists, 4 Jewry Street, London.

**T**o Wholesale Druggists, Druggists, &c.—A young man, with three years' laboratory experience in B.P. preparations and specialties, and some knowledge of wet counter, wants situation where he could enlarge his general and commercial knowledge of the trade, or as Laboratory Assistant. Address, K. A. Z., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**I**MMEDIATELY, Assistant or Branch Manager (outdoor); good Prescriber, Dispenser, and Extractor; aged 32. Knibbs, 64 Mildmay Road, N.

**T**EMPORARY or Permanent; aged 23; extractor; height 5 ft. 10 in.; disengaged April 1. "Chemist," 32 Loampit Vale, Lewisham.

**A**S Locum Tonens or Manager, or Town Traveller to Drug or Sundry House. "Coated," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**E**NERGETIC Assistant; unqualified; 19 years' varied experience; Wholesale or Retail; married; aged 33. "Drugs," 41 Horsell Road, Highbury, N.

**W**HOLESALE.—A young man seeks an engagement as Traveller, Drugs or Sundries; 2½ years' experience; excellent references. Shuttleworth, Silver Street, Gainsborough.

**P**HARMACEUTICAL Chemist (24) wishes to hear of Position in a good business, Manufacturing or Retail, with a view to Partnership or Purchase. Address, H., Moreton House, Cheetham, Manchester.

## MISCELLANEOUS.

*Special charges are made for Advertisements under this heading, which can be obtained on application.*

**P**ROPRIETARY Articles.—Wanted to Purchase. Must show good profits. Apply, by letter, to J. S., care of Mr. Ponting, 40 Aldersgate Street, London, E.C.

**P**ERSONS wishing to Purchase or Sell their Businesses will do well to communicate with Messrs. Fowler & Miller, Chemists' Transfer Agency for the North of England, 60 Fawcett Street, Sunderland.

## PRELIMINARY AND MINOR.

**A**LL Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. Student's Herbarium, 100 specimens, 7s. 6d., post free.

## STUDENTS' AIDS TO EXAMINATION.

**P**RELIMINARY.—Arithmetic and Metric System, 1s. How to Write an Essay, 3d. Cæsar Simplified, 1s. Knotty Points in Latin Grammar, 1s. 6d. **MINOR.**—Equations Simplified, 1s. Illegible Autographic Prescriptions, 1s. Notes on Dispensing, 1s. Prescriptions given at the Minor, 6d. "Chemist," care of Mr. J. Edwards, Wye, Kent.

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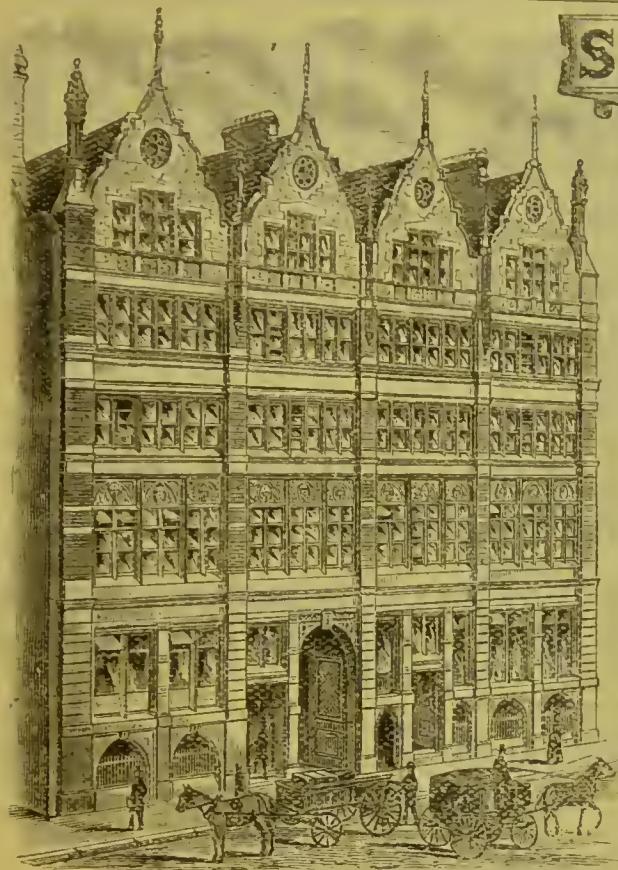
Thro' any Wholesale House, or post free for P.O.

**ROUSE & CO.,** 12 WIGMORE ST., LONDON, W.

## OUR WEEKLY SUPPLEMENT.

We have prepared a set of forms for small advertisements (assistants wanted, businesses for disposal, exchange column &c.). With these are attached tables of useful reference matter (Sale of Poisons, Postal Information, Annual Licences, Metric Weights, Measures, Medicino Stamps, Law and Public Offices, &c.). We shall be glad to send one of these sets to any subscriber who will send us an addressed postal wrapper (bearing a halfpenny stamp). As the object of this production is to encourage the insertion of such advertisements as we have named in THE CHEMIST AND DRUGGIST, we hope this offer will be taken advantage of chiefly by those subscribers who are willing to use this journal whenever opportunities occur.

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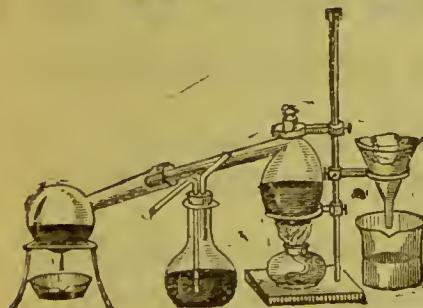
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*These are universally acknowledged to be the Genuine, and Druggists may safely recommend them.*

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The Proprietors of Kearsley's Original Widow Welch's Female Pills find it incumbent on them to caution the purchasers of these Pills against various imitations by parties who have no knowledge of their peculiar preparation, the Original Rootpo having been sold to the late G. Kearsley, of Fleet Street, whose Widow found it necessary to make an affidavit, for the protection of her property, in the year 1798. The Genuine Recipe for Widow Welch's Female Pills has been prepared by them for 100 Years! Chemists are particularly requested to remark that, as a testimony of authenticity, each bill of directions contains an affidavit, and bears the signature of "C. KEARSLEY," in writing, also engraved on the Government Stamp, and each box is wrapped in WHITE paper.

*Price 27s. per Dozen, subject to usual Discount. Special Quotations to Shippers and for large quantities on application to*

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MARCH 15, 1890

THE CHEMIST AND DRUGGIST.  
**SUPPLEMENT**

Telegraphic Address—  
"BEATROP LONDON."

Telegraphic Address—  
"BEATROP LONDON."

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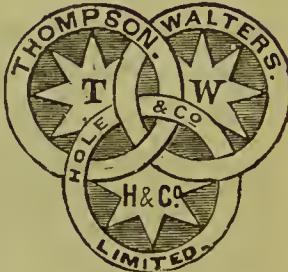
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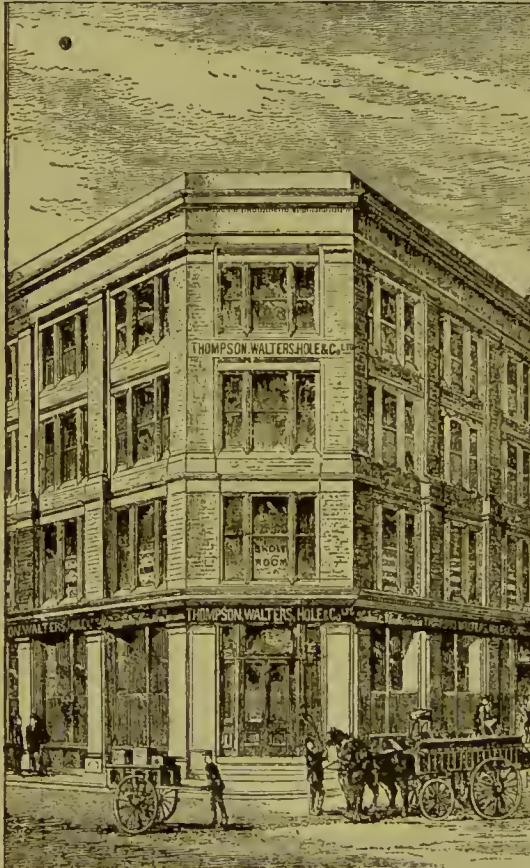
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## Proprietary Articles.

3s. and 5s. Ed. Dobson's black leg drinks; no reasonable offer refused. 26.29.

## Formulae.

Recipe for self-raising flour; satisfaction guaranteed; 18 stamps. 23.41.

Reliable recipes, 6d. each; full set of 130 neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.

Manxland Bonnet, similar to the most celebrated of the Isle of Man perfumes; by a native; sample free 2 stamps; copy of recipe, 5s. 29.2.

Brooks' Recipes.—All practical; easily made; pay splendidly.—Toothache cure, seldom fails; Blood Cleanser, excellent preparation; Hop Tonic, costs 1s. lb.; Herbalade, fine aroma, appetising and digestive; Juhfice Sauce, mellow, pleasant, appetising, digestive, 6d. pint; Pig Powders, best sold; Ringworm Specific, never fails; Influenza Mixture, sold with confidence; Nursery Lotion (non-poisonous), certain death to nits, &c. Recipes 7d. each, 3 for 1s. 6d.; post free also list of 400. Tom Brooks, Chemist, Hornsey, N.

## Literature.

What offer for Cassell's "Family Physician," 4 vols.; special edition? 27.38.

What offers? 8 volumes *Chemist and Druggist*, with Diaries. Andrew, Madeley, Salop.

Are the *Pharmaceutical Journals* from No. 1 to the present time, bound and unbound, of any value? G. S. Simpkins, Stourbridge. Journals of the Society of Chemical Industry for 1886, 1887, 1888, and 1889; highest offer in cash accepted. Fletcher, 11 Abbey Walk, Grimsby.

What offers for *Chemist and Druggist*, 1876 to 1879, and 1881 to 1888, 3 or 4 numbers missing. Apply, W. Willey, Chemist, 253 Cleethorpe Road, Grimsby.

*Chemist and Druggist*, unbound, 1878, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888 (two numbers short), six and seven months 1879, 1880; lot 20s. Hartley, Chemist, Todmorden. "Year Book of Pharmacy," 1870 to 1882, quite clean; "Progress of Pharmacy," Bentley and Redwood; Lindley's "School of Botany," 13th edition; Bentley's "Botany," 3rd edition; offers. Guest, Brentwood.

What offers?—For sale, "Year Book of Pharmacy," 8 vols. 1873 to 1880; also 31 vols. *Pharmaceutical Journal*, vols. 7 to 17, and 1 to 9 new series, in green cloth, 1870 to 1881 vols. in half calf. Apply to F. Thompson, 20 High Street, Bedford.

## Shop Fittings.

Handsome open window screen; mahogany dispensing screen, very low price. Sangster, Hampstead.

Fittings, Bottles, &c., to be disposed of; will suit shop or open surgery. Apply S., 13 Great Russell Street, W.C.

Mahogany and plate-glass upright floor showcase, with moveable shelves, excellent condition, 6 ft. by 2 ft., 7 in. by 11 $\frac{1}{2}$  in.; cost 87. 15s.; take 41. 15s.; also Chappuis' daylight reflector, and Enterprise tincture press. Particulars, S., Market Place, Stroud.

Glass bottles, job lines.—About 50 gross 3-oz. pale green bottles for corks, suitable for perfume, vaseline, or furniture cream, 4s. per gross; 3 gross 4-pint (reputed) green glass syrups, 7s.; 2 gross pint ditto, 15s.; 3 gross 1-pint white glass syrups, 20s.; 3 gross 2-oz. white globe-necked panels, 7s. Hearn, Bottlo Works, 321 Kingland Road, London.

Counter-case, bent plate-glass, as Maw's A16, measures 8 ft. long, price 7s. 10s.; also 5 ft. to match, price 5s.; both as good as new. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Counters.—One 12 ft. long, solid mahogany, with plate-glass doors in front, quite modern and handsome, price 12s. 10s.; also 6 ft. counter, with solid mahogany front and top, price 6s. Philip Josephs, 54 Old Street, Goswell Road, E.C.

Drawers.—20 nests, from 2 ft. to 12 ft. long, with glass labels and glass knobs; great bargains.

Philip Josephs, 54 Old Street, Goswell Road. Black store bottle, with caps and gold labels, stand 14 $\frac{1}{2}$  in. high, price 1s. each; also, a lot of second-hand shop-rounds cheap. Philip Josephs, 54 Old Street, Goswell Road.

Dispensing screen, very handsome, 6 ft. long, price 7s. 10s., and two first-class sponge cases, 5s. and 6s. each. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

12 dozen imperial fire hand grenades, half invoice price; 12 Sugg's patent burners, in good order, with cap shades and supports; 2 Wenham burners, without glasses; 2 Welshbeck ditto, and 1 Diamond burner; mantles only required; all above at less than half-price. *Chemist and Druggist* and *Pharmaceutical* for last 15 years, first offer taken; "Enterprise" drug-press, Bracher's automatic still, and nickel pellet-mould; all good as new; useful exchange entertained. Brearey, Douglas, Man.

1 31-in. specie jar, total height, scroll label, ornamental glass cover, 17. 15s.; 2 23-in. specie jars, Royal arms, ornamental metal covers, and mahogany plinths, 4s.; 4 16 $\frac{1}{2}$ -in. high ditto, ornamental scroll labels, flat japanned covers, each 7s.; 1 30-in. ditto, Royal arms, glass gilt cover, 27. 17s. 6d.; 1 30-in. ditto, phoenix, glass gilt cover, 27. 5s.; 1 16-gall. carboy, cant stopper, 17. 15s.; 1 12-gall. ditto, 17. 5s.; 1 7-gall. green carboys, gold labels, large japanned caps, stoppered, 4 3-quart ditto, 17. 10s.; several nests of drawers. W. Hawke & Son, Shop Fitters, Wild Court, Great Wild St., London.

Glass bottles; following surplus lines cheap:—Square capers, 6 doz. 2-oz., 3 doz. 4-oz., for 3s.; best oval dispensing, stamped "Slight, Lincoln," 4 doz. 16-oz., 3 doz. 12-oz., 4 doz. 8-oz., 7 doz. 6-oz., 7s. gross all round; blue castor-oils, 3 doz. 22-oz., 3 doz. 16-oz., 2 doz. 12-oz., for 10s.; long-neck lavender, white, 4 doz. 2-oz., 2 doz. 1 oz., 2 doz.  $\frac{1}{2}$  oz., for 3s., square Oldham essence, 8 doz. 1-oz., 3 doz. 3-oz., for 4s.; antiseptic poison flats, 2 doz. 4 oz., 2 doz. 18 oz., 3 doz. 2-oz., for 2s.; blue poisons, 10 doz. altogether, 1-oz., 2-oz., 3-oz., 4-oz., for 2s. 6d.; round essence, glass sprinkler taps, 2 $\frac{1}{2}$  doz.  $\frac{1}{2}$  oz. and 1 $\frac{1}{2}$  oz., for 1s. 6d.; blue citrines, not stoppered, 3 doz. 8-oz., for 1s. 6d.; direct squares, 3 doz. 16 oz., 1 doz. 8-oz., for 2s.; packages free; no carriage. Kemp & Son, Horncastle.

For Sale.—Fargains.—All numbers refer to Maw's Illustrated List.—Wall cases: 8 ft. piano case, as A88, a bargain; 6 ft., as fig A83; ditto, 3 ft.; several others cheap. Elkanah Natali, 207 Old Street, Shoreditch.

Dispensing screens, as A54, 3 ft., 4 ft., 5 ft.; as A55, 5 ft., 6 ft., 7 ft., and 8 ft., at very low prices; screens, with silver plate-glass centre and cases at each side, with tablets on top. "Dispensing Department," 3 shelves at back (total length, 5 ft., 6 ft., 6 ft. 6 in., 7 ft., 8 ft.); sketch on application. Elkanah Natali, 207 Old Street, Shoreditch.

Counter cases, A18, 5 ft., 5 ft., 10 in., 6 ft., 6 ft. 10 in., cheap; as A16, 4 ft. 8 in., three 3 ft. 1 in.; do., 4 ft. 6 in.; do., 4 ft. 1 in., 2 ft. 5 in., cheap; several others at low prices. Mahogany and plate-glass desk and cases, from 45s. to 65s.; counter case, as A15, 2 ft. long, 5 ft. 7 in., long; tool brush cases, as A9 and A10, cheap; sponge cases, as A41, cheap; show stand, with 3 plate-glass shelves, as fig. 3, 4, 5, and 6, at low prices. Elkanah Natali, 207 Old Street, Shoreditch. No connection with any house of same name.

Specie jars, from 18 in. to 35 in., royal arms; dispensing scales, as fig. 7; pill machines, ointment jars, pink and blue, bottles, mortars, at low prices; 17 ft. run of mahogany-fronted drawers, lockers, shelving, cornice, &c., 107. 10s.; wall fixtures, 12 ft., 16 ft., and 20 ft., cheap. Elkanah Natali, 207 Old Street, Shoreditch. No connection with any other house of the same name.

## Miscellaneous.

Patent check till. State particulars and lowest price. Smith, Chemist, East Perleham.

About 34 dz. 2-oz. bears'-grease jars, turn-in labels (blue), 20s. 10s.; sample 3 s. m. j. 28/41.

5-gr. pill-machine, 24, good condition. 10s. 6d.; Copley's "Cyclopaedia," 8s. Ed. 4 Newstead Grove, Nottingham.

Microscope and condenser, in mahogany cabinet, by W. Wood, cost 31. 15s., used few times only, 17. 18s. Ed. Guest, Brentwood.

Microscopic slides, anatomical, pathological, interesting; lists and sample free. T., 233 Maida Vale, W.

Pair handsome specie jars, 24 in. high; good condition, cheap: "Enterprise" tincture press, 7s. 6d.; Miller's safe, 22 x 16 x 16. 27/39.

American ice-cream, soda, and fruit drink machine; complete, with 9 E. P. taps and all fittings; large soda cylinder, &c.; cheap; good investment. W. B. Smith, Gosport.

Cigars, 20 one hundred, choice Princesses, &c., cost 11s.; 10 one hundred, 10s. Ed., cost 13s. Ed.; 25 fifties, 6s. 3d., cost 8s.; in prime condition, to clear. Slater, Beeston Hill, Leeds.

Profitable.—10 doz. Florida sponges, fair quality and shape, sell 9d. to 1s., for 4s. 6d. doz.; sample 3, 1s. 3d. post free. Also six mammoth honeycombs, finest quality; good advertisement; 6s. Ed. to 7s. 6d. each; sent on approval. Brooks, Chemist, Hornsey, N.

Chemist's lamp, 18-inch globe, 2 by 5-inch ball's eyes, with reflectors, 2 gas lights, brass ball joint, handsome bracket; stand any weather; nearly new; cost 7s., take 5s.; 3 dozen Dobson's black leg drinks, 3s.; 1 dozen, 5s. Ed.; cash or exchange any reasonable offer; cyclostyle, nearly new; what offers? Carpenter, Pharmacy, Burnham, Somerset.

## WANTED.

Small quantity Vipond's hemorrhoidal fruit pastilles, at once. Graham, Chemist, Girvan.

Mayhew's "Horse Doctor." State edition and price. Foggan, Chemist, Bedlington.

Twenty-four one-gallon black store bottles, japanned caps, gold labelled. "Chemist," 94 Canterbury Road, Kilburn.

Few copies of *The Chemist and Druggist* for January, 1889. Full price will be paid by the Publisher, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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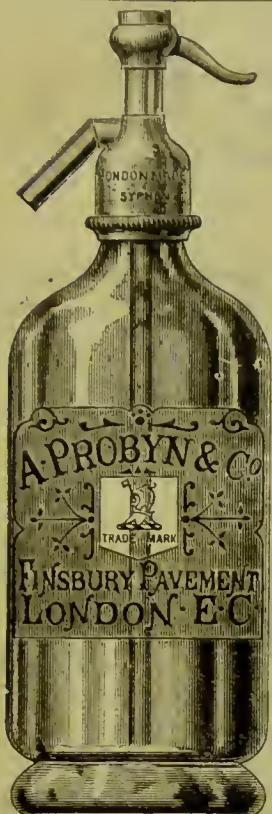
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Nickel plating from 2½d. each, Silver plating from 4½d. each. Marking on Metal Tops free, but Die charge for at cost price. Marking on Glass by acid process, from 1d. each; steel plate for printing from charged extra, according to design; no charge, however, will be made for this plate for orders of 1,000 and over.

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# "INVIGORINE"

(REGISTERED TITLE).

THE NEW AERATED TONIC  
Pleasant, Refreshing, and Invigorating.

Successful Wherever Introduced  
Specially Useful in Hot Climates.

Retail 2/6, Wholesale 24/- Doz. net,  
Through the Wholesale Houses or of

THE "INVIGORINE" MANUFACTURING CO.  
114 Leadenhall Street, LONDON, E.C.

## APPARATUS for DISTILLING & CONCENTRATING in VACUUM

EGROT & GENEVOIX'S SYSTEM, PATENT.

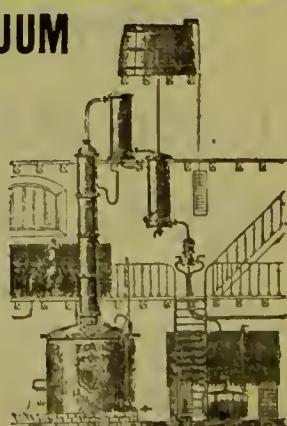
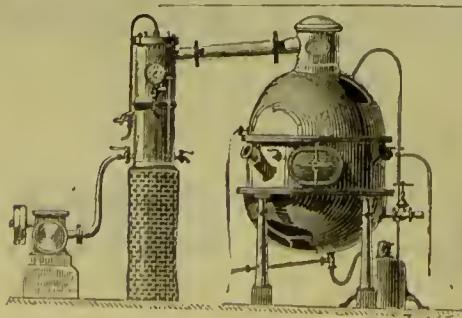
STILLS & PANS FOR CHEMISTS,  
DRUGGISTS, &c.

RECTIFYING APPARATUS  
Egrot's System, Patent,  
FOR BENZOLE, ETC.

EGROT,  
Chevalier of the Legion of Honour,  
MANUFACTURING ENGINEER,  
19, 21 & 23 RUE MATHIS, PARIS.  
FIRM FOUNDED 1780.

PARIS EXHIBITION, 1889—Beyond Competition as  
Member of Jury.

PRICE LIST FREE.

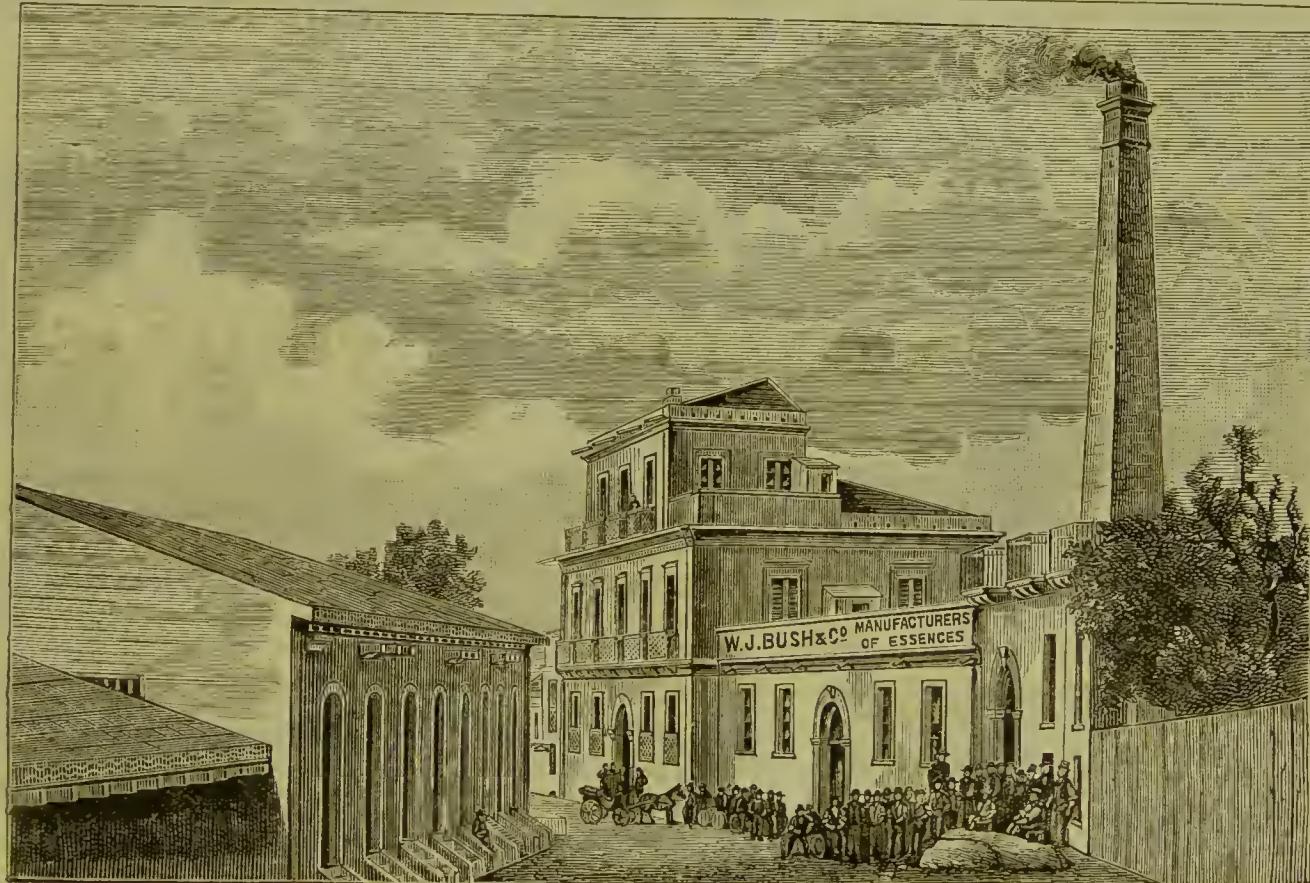


Egrot & Genevoix Apparatus.

# PURE ESSENCE LEMON

DIRECT FROM THE MAKERS.

SAVE INTERMEDIATE PROFITS AND BUY PURE ESSENCES!



W. J. BUSH & CO.'S ESSENCES OF LEMON AND ORANGE FACTORY.

By making the Essenees ourselves on the spot, we were enabled last season to offer to the Trade a quality that had never been seen before in this or any other market! Notwithstanding the great opposition we had to encounter, combined with the somewhat libellous statements that were made by our competitors, both here and at Messina—caused through common jealousy—the trade has appreciated our efforts and our success in being able to offer them an Essence so superior in quality, that never before have we sold so large a quantity. Through this fact we are pleased to inform our friends that it has been necessary for us to take another manufactory in Villaggio Gazzi, Messina, which is no less than three times the size of the one in Strada Antico Cimitero, a portrait of which you will see above.

**W. J. BUSH & CO., ARTILLERY LANE, LONDON.**

# “MYRTLE GROVE” TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and  $\frac{1}{4}$ ,  $\frac{1}{2}$ , 1 lb. Tins only.



TADDY & CO., 45 Minories, LONDON

ESTABLISHED 150 YEARS,

SNUFF, TOBACCO, AND SEGAR MANUFACTURERS.

Write for List of Specialities.



## PASCALL'S GOLDEN MALTEX

MANUFACTURED UNDER PATENT NO. 1,506.

TITLE FULLY PROTECTED IN THE COLONIES.

Contains 25% of Allen & Hanburys' Extract of Malt.

## PASCALL'S BLA-CUR-EX.

Composed of Black Currant Extract and Price's Glycerine.

NOVEL CONFECTIONERY. MOST SALEABLE. DELICIOUS FLAVOUR. BRILLIANT AND ATTRACTIVE APPEARANCE. SELL AT SIGHT.

Vide Dr. Tanner's Report, and *The Chemist and Druggist*, April 20th, 1889.

Small Bottles containing about 6 oz., and 1-lb. Bottles

OF ALL WHOLESALE HOUSES, OR OF

JAS. PASCALL, Manufacturing Confectioner,  
BLACKFRIARS ROAD, LONDON, S.E.

## HUMPHREY DAVY & SON (LIM.)

MANUFACTURING CHEMISTS AND PERFUMERS,

WHOLESALE & EXPORT DRYSALTERS, OIL MERCHANTS & PACKERS,

MANUFACTURERS OF

FURNITURE CREAM, POLISHING PASTE, WRITING INKS, LIQUID BLUE,  
KNIFE POLISH, PLATE POWDER, &c.

VICTORIA WORKS, Masbro Street, ROTHERHAM.

## ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt,  
and sound Port Wine.

### REPORT ON BEEF WINES.

From the results of my Analysis of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University),  
December 15, 1888.

## ROBINSON'S ORANGE WINE.

Specially prepared for Quinine Wine, does not deposit, will keep good in any climate, and well adapted for Export Trade. Supplied in Casks containing 9, 18, 30, 60, or 120 Gallons. Terms on application. [2]

## PHARMACEUTICAL SHERRY WINE.

This Wine is well adapted for Pharmaceutical Preparations, and is the strength ordered by the B.P. Price, in 6-Gallon Casks, 5/8 per gallon; in 2 Gallon Jars, 6/- per gallon, carriage paid. Casks charged 7/6, Jars 2/6, and allowed if returned. Cash or satisfactory reference to accompany order.

B. ROBINSON, Distiller and Brewer of British Wines, Church St., Pendleton, Manchester.

146 MINORIES, LONDON, E.C.  
New York  
Sydney  
&c.

**SODA-WATER MACHINERY**  
AND ALL ACCESSORIES  
FOR THE TRADE

BOXES BOTTLES, MACHINERY,  
ESSENCES.

Catalogues, Circulars, Testimonials  
Post Free

**BRATBY & HINCHLIFFE** LIM.  
HEAD OFFICE  
SANDFORD ST., ANCOATS, MANCHESTER.

**SYPHONS & SELTZOGENES**  
GREAT REDUCTION IN PRICE.

We have recently been entrusted with a most important Agency for the above-named goods. Our Principals are the best known firm in Paris, and the Syphons are undoubtedly the cheapest and strongest in the market. The tops are made of pure English Tin, guaranteed free from lead. The Seltzogenes are made on the well-known "Fevre" system, and each one is thoroughly tested before being sent out.

WE CAN GIVE TO LARGE AND SMALL BUYERS EXCEPTIONALLY LOW PRICES.  
PLEASE WRITE US AT ONCE FOR PRICES, STATING QUANTITY OF EACH KIND REQUIRED

**SODA-WATER MACHINERY.**  
MELBOURNE EXHIBITION, 1889, UNPRECEDENTED SUCCESS.

We have obtained at the above Exhibition

**3 HIGHEST AWARDS** POSSIBLE

A feat never accomplished before by any other house supplying requirements for the Aërated Water Trade.

These awards will carry with them **THREE GOLD MEDALS**, which were awarded as follows:—

1st—SODA-WATER MACHINERY (Highest Award possible).

2nd—ESSENTIAL OILS & FRUIT ESSENCES (Highest Award possible).

3rd—PATENT AND ORDINARY BOTTLES (Highest Award possible).

WRITE FOR NEW ILLUSTRATED CATALOGUE, POST FREE.

**BRATBY & HINCHLIFFE, LIM.**

Aerated Water Engineers and Glass Bottle Manufacturers,

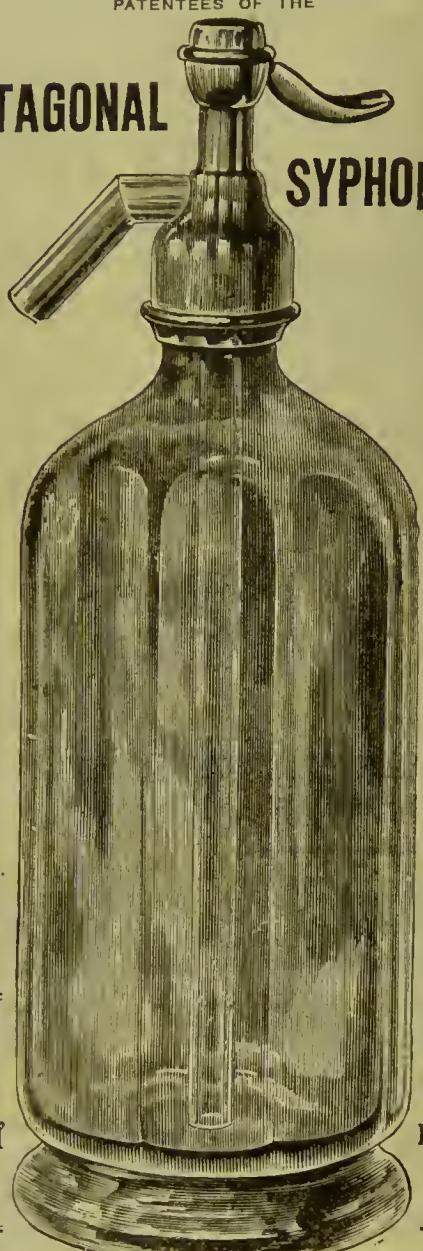
SANDFORD ST., ANCOATS, MANCHESTER

And at 146 MINORIES, LONDON, E.C.

JAMES VIDIE ET FILS,  
Pantin Glass Works,  
PATENTEES OF THE

OCTAGONAL

SYPHON.



SECTIONAL VIEW.

SOLE AGENT:

C. MELIN, 37 CRUTCHED FRIARS, LONDON, E.C.

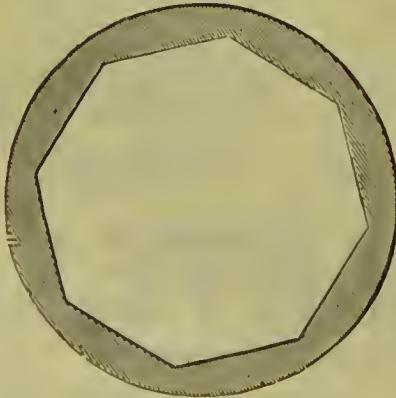
The "Octagonal" is externally similar to the ordinary Syphon, the interior being blown of an octagonal shape by a new patent process.

Sample sent on receipt of  
2/-

Sample sent on receipt of  
2/-

TO BE HAD OF  
ALL MINERAL WATER ENGINEERS.

ALL MINERAL WATER ENGINEERS.



A WONDERFUL SUCCESS!!

NON-INTOXICATING BEER  
Made from MASON'S Original

## EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound  
ENLARGEMENT OF SIZE.A Sixpenny Bottle makes EIGHT GALLONS OF  
HERB or BOTANIC BEERA NON-INTOXICATING BEVERAGE  
Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most  
perfect substitute for Alcoholic Drinks ever discovered, for either  
Summer or Winter.

BEWARE of mean and fraudulent imitations.

BEWARE of others copying our title.

MASON'S is the original and only genuine.

MASON'S is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1/-, &amp; 2/- each, with directions.

## MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.  
These are having a very large sale now, and are extensively advertised.

Sold in Bottles at 8d., 1/-, and 2/- each.

Quotations on application.

SOLE INVENTORS &  
MANUFACTURERS: NEWBALL & MASON,  
Manufacturing Chemists and Botanic Druggists. NOTTINGHAMDRIED  
BITTER ORANGE PEELThis Peel is specially cut as *free from pith* as possible, and by care in  
drying its Colour and Aroma are well preserved. It is thus in a condition  
most favourable for the manufacture of the Official preparations.

Sample will be sent free on application.

## "EXCELSIOR" TABLE JELLIES

IN CARDBOARD BOXES.

Of  $\frac{1}{2}$ -Pint, Pint, and Quart Size, packed in Wood Boxes free.  
 $\frac{1}{2}$ -Pints, 1/- per doz.: Pints, 3/- per doz.: Quarts, 5/- per doz.

FLAVOURS:

Orange, Lemon, Calves' Feet, Vanilla, Raspberry, Noyeau,  
Cherry, Strawberry, Pineapple, and Black Currant.CHAS. SOUTHWELL & CO.  
DOCKHEAD, LONDON, S.E.

TO AERATED WATER MANUFACTURERS



# WAXYS

## SOLUBLE ESSENCES

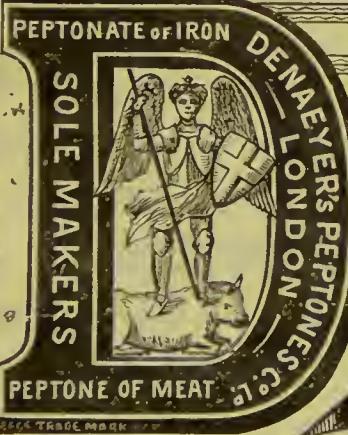
REGISTERED

ARE GUARANTEED TO BE THE FINEST IN THE MARKET  
ESSENCES OF GINGER, LEMON, ORANGE, &c., &c.

HOP ALE &amp; GINGER ALE ESSENCES.

Besides Gold & Silver Medals the above Essences have obtained the Highest Testimonials  
from all the Medical Journals,  
and from the Principal Trade Journals in this and other Countries.

PRICE LIST FREE ON APPLICATION.

MANUFACTURING  
CHEMIST.  
BEVERLEY ROAD.

# DENAEEYER'S

## LIQUID PEPTONES STERILIZED

Free from microbes!

Keep good for ever in all Climates.

118 BISHOPSGATE STREET WITHIN, LONDON, E.C.

DENAEEYER'S PEPTONATE OF IRON. A bland, non-irritating and most easily assimilable ferruginous preparation. For debilitated constitution, children, and aged people.

DENAEEYER'S PEPTONE OF MEAT. A powerful restorative for all ailments of the stomach, stimulates general nutrition. Is retained when the stomach rejects all other food. Pleasant to taste.

For all Chemists and Wholesale Houses.

## FOR FILTERS

Perfect in Mechanical and  
Chemical Action, Reliable  
Durable, Easily Cleaned.LIPSCOMBE, OXFORD  
STREET, LONDON, W.

Makers to the Royal Family,

Original &amp; sole inventor of the celebrated improved Filter

The ONLY GENUINE are made SOLELY by the Sons of the late Mr. Lipscombe. As there are watches and watchies, so there are Filters and Filters, and the Trade are Cautioned against feeble Imitations of Lipscombe's Filters. To avoid grave disappointment, address—

LIPSCOMBE, OXFORD STREET, W.

This Caution is necessary as we have no connection with any other Firm TRADING under the same name. Caveat Empor.

T. & F. J. TAYLOR'S  
AERATED WATERS,  
Newport Pagnel.  
ESTABLISHED 1885.



SODA, POTASH, SELTZER, AERATED (without  
Alkali), and LITHIA WATERS,  
LEMONADE AND GINGER ALE.

Each Bottle is protected by a Label bearing the Signature  
of the Firm.

Purity and Excellence of the Water certified by Analysis  
by Professor ATTFIELD, Ph.D., F.O.S.



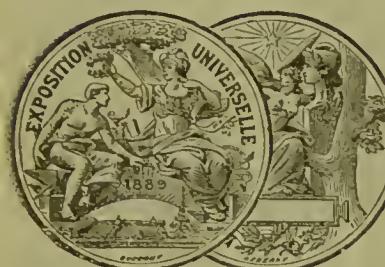
# TOWER TEA

OBTAINED THE

# HIGHEST AWARD

FOR TEA AT THE

# PARIS EXHIBITION.



PRIZE MEDAL, PARIS, 1889.

To avoid imposition see that the trade marks (a Tower, with the word "Strength" across it, and "Tower Tea") are on every package, without which none is genuine.

WHERE VACANCIES EXIST AGENTS ARE APPOINTED BY



PRIZE MEDAL, PARIS, 1889.

**THE GREAT TOWER STREET TEA CO., LIMITED**  
5 JEWRY STREET, LONDON, E.C.

## SANTHA.

A Digestive EXTRACT OF TEA, made  
instantly in Cup or Teapot.

The injurious action of tea upon the digestion is due to the tannin it contains; and as this dissolves instantly in hot water, no method of infusion can keep it out. Santha is the only form of tea that has no action upon either food or membranes; and it is not bilious like cocoa and coffee. The *Lancet* of May 4th, 1889, says:—"The aroma and the caffeine are preserved, and the tannin is neutralised and rendered innocuous." The *London Medical Recorder* of Feb. 20th, 1889, says:—"Santha possesses the aromatic and stimulating qualities of the crude leaf, minus its astringency." The *Illustrated Medical News* of August 31, 1889, says:—"We can recommend it as the most digestible and palatable form of tea yet submitted to us." Santha is the only Tea suitable for Weak Digestions. Of Chemists, &c., 1s., 2s. 6d., and 6s.; or by post from works, 2d. extra.

SANTHA TEA COMPANY (LIMITED), Penarth Street, Hatcham, S.E. Wholesale Agents—BARCLAY & SONS, Farringdon Street, E.C.

## MILLAR'S BRITISH WINES.

ORANGE (suitable for Quinine), GINGER, RAISIN, COWSLIP, CHERRY, &c.  
A. MILLAR & CO., Thomas Street, DUBLIN.

SOLE Agents for London and District—H. J. ROYDANT & CO., 75 Acre Lane, Brixton, S.W.

## CIGARS, ETC.

At the Lowest Wholesale Prices.

La Juana .. .. .. 10/6 per 100, Sold at 2d. each.  
La Trafalgar .. .. .. 15/0 .. .. .. 3d. ..  
El Sol Habaners, .. .. .. 22 per 100, Sold at 4d. each.  
Havannah 1885 Crop } 22 per 100, Sold at 4d. each.  
&c., &c. TOBACCO, CIGARETTES, &c.

Samples on receipt of 1s. 6d. in Stamps.

**BEWLAY & CO., LTD.**  
Tobacco Manufacturers and Cigar Importers,  
49 STRAND, and at 143 CHEAPSIDE, LONDON.  
ESTABLISHED OVER 100 YEARS.

## HUGO BROWN & CO.

41 Ormond Street, LIVERPOOL,  
SOLE AGENTS IN EUROPE FOR LIEBIG'S

## EXTRACT OF BEEF

MADE BY

MESSRS. A. SANTA MARIA & CO.  
PAYSANDU.

Sold as imported in cases of two tins each, weighing together  
about 112 lbs.

TO THE  
**CHEMISTS & DRUGGISTS**  
 OF  
**GREAT BRITAIN.**

TELEGRAPHIC ADDRESS:  
 COLEMAN,  
 GEORGE'S, NORWICH.

St. George's, Middle St.  
 NORWICH,  
 December, 1887.

The Excise Authorities having created a difficulty as to the sale of Medicated Wine containing a certain percentage of alcohol, we obtained in January last, from the Inland Revenue Authorities, permission to sell our Liebig's Extract of Meat and Malt Wine, **WITH QUININE**, without a Wine Licence, and many Chemists not holding a Wine Licence have sold considerable quantities. In order further to meet the requirements of the trade, we have introduced a Liebig's Extract of Meat and Malt Wine, **NON-Alcoholic**, made from the juice of the Grape, Liebig's Extract of Meat, and Extract of Malt. This also can be **SOLD WITHOUT A WINE LICENCE**. Your orders will oblige either direct or through the Wholesale Houses.

Yours obediently,

**COLEMAN & CO., LIMITED.**

**N.B.—The Wine is sold in Bottles, 2/9 and 4/6 each.**  
 Trade prices on application.

**P.S.—Where the Magistrate's Certificate is not held we are willing to pay the entire cost of a Retail Certificate (the holder of which can sell any kind of Wines) if an assorted order of 6 dozen is sent us of any of our preparations. List on application. Our Liebig's Extract of Meat and Malt Wine **WITHOUT QUININE** commands a very large sale, and is recommended by over one thousand medical men who have sent us testimonials in its favour.**

SOLE MANUFACTURERS—

**COLEMAN & CO., LIMITED,**  
 ST. GEORGE'S NORWICH,  
 AND 3 NEW LONDON STREET, LONDON, E.C.

EIGHT PRIZE MEDALS AWARDED

**GOODALL'S  
 HOUSEHOLD  
 SPECIALITIES.**

**YORKSHIRE RELISH.**

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each.

**GOODALL'S BAKING POWDER.**

The Best in the World. 1d. Packets; 6d., 1s., and 2s. Tins.

**GOODALL'S EGG POWDER.**

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

**GOODALL'S CUSTARD POWDER.**

Delicious Custards without Eggs. In Boxes, 2d., 6d., and 1s. each.

**GOODALL'S BLANCMANGE POWDER**

Delicious Blanmange in a Few Minutes. Boxes, 6d. and 1s. each.

**GOODALL'S QUININE WINE, B.P.**

Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

**GOODALL'S GINGER-BEER POWDER.**

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

**GOODALL'S BRUNSWICK BLACK.**

For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles.

**GOODALL'S LAVENDER WATER.**

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

**GOODALL'S PLATE POWDER.**

For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and 2s.

**GOODALL'S JELLY SQUARES.**

Make a Delicious and Nutritious Jelly. In  $\frac{1}{2}$ -pint, 1-pint, and Quart boxes, 3d., 6d., and 1s. each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS.

**PATENT MEDICINES  
 AND  
 DRUGGISTS' SUNDRIES.**

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

**GOODALL, BACKHOUSE & CO., LEEDS.**

THE

# PURE MALT EXTRACT CO.

## THE PURE MALT CO.'S EXTRACT OF MALT.

An Effective and Agreeable Remedy for Affections of the Throat and Lungs incidental to Influenza.



32-cz. Bottle, 2/10.  
22/- per doz.



4-cz. Bottle, 6d.  
4/- per doz.

When one dozen of each size is ordered, we pay carriage.

To Chemists and others who wish to fill their own style of Bottles, we supply our Malt Extract in 14-lb. Jars, 48/- per cwt.

### EXTRACT OF MALT

Is undoubtedly useful in Consumption and other Wasting Diseases.

### EXTRACT OF MALT

Makes palatable that valuable restorative Cod Liver Oil.

### EXTRACT OF MALT

May be taken with the meals in Coffee, Cocoa, or any other beverage.

### EXTRACT OF MALT

Mixed with Porridge, Gruel, Sago, Arrowroot, it renders them easy of digestion.

### EXTRACT OF MALT

Dissolved in Milk it is of great service, being pleasant to the taste and easily retained.

### EXTRACT OF MALT

Is pronounced to be one of the best digestive agents.

### EXTRACT OF MALT

Prepared from the best Malted Barley by an approved method.

As Samples we will send one Bottle of each size, carriage paid, on rec'd of Remittance for 4/3.



16-oz. Bottle, 1/8.  
12/- per doz.



8-oz. Bottle, 10d.  
7/- per doz.

Special Terms to Merchants, Shippers, and the Wholesale Houses.

THE PURE MALT EXTRACT CO.  
NEATE STREET, CAMBERWELL, LONDON, S.E.  
City Office—MANSION HOUSE CHAMBERS, BUCKLERSBURY



PEDESTAL.

## TYRER'S

1d. sizes



BOTTLE.

## MENTHOL

6s. gross

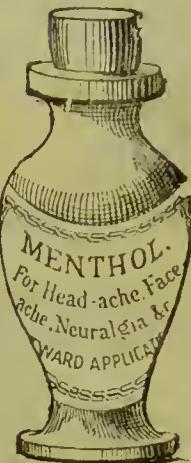


FIG. A.



FIG. B.

INFLUENZA  
CURED BY  
MENTHOL.

Dr. LENNOX BROWNE says:—"It kills the microbe of infection."—*Vide MEDICAL PRESS AND CIRCULAR*, January 8, 1890.

2d. Size, as Fig. A and B, 12s. gross, stained and varnished, all put on  $\frac{1}{4}$ -gross cards with ELASTIC. Sample free.

PETER TYRER, 70 LONG LANE, BOROUGH, LONDON, S.E.

## SOLD EVERYWHERE.

Makes the best  
GRAVIES, SOUPS, &  
SAUCES.

IMPROVES  
STEWs and  
HASHES.

ASK YOUR GROCER FOR  
EDWARDS' GRAVY POWDER.

REGISTERED

PUT UP  
IN

Self-opening Canisters

1-lb, 1/10;  $\frac{1}{2}$ -lb, 1/-;  $\frac{1}{4}$ -lb, 6d

Sample Free on receipt of Business Card.

NOURISHING.

ECONOMICAL.

SOLE MANUFACTURERS—

F. KING &amp; CO., LTD.

3 to 6 Camomile Street, LONDON;  
26 WARING STREET, BELFAST.

## WILKINSON'S COMPRESSED

Best Hops compressed into small parcels of one pound and half-pound, and sent out in cases containing 30 lbs. each. These hops are specially selected and compressed for keeping purposes, and will retain their aromatic strength for a considerable time.

## ENGLISH HOPS.

They are introduced to the public to enable them to make their own HOP BITTERS, YEAST, HOME BREWING, and numerous other purposes. Full particulars given in each packet.

Samples and Prices sent on application to

A. WILKINSON & SONS, 37 CANNING PLACE, LIVERPOOL.

P.S.—Chemists will naturally see the great advantage in making their own Bitters from the Pure Hop itself. Dealers in every description of Isinglass.

"RAMORNIE."

LIEBIG'S Extract of Meat.

As supplied to the Admiralty, War, and India Offices.

1-lb. Jars.....	per lb. 6/9	..... per doz. 81/0	2-oz. Jars.....	per lb. 7/8	..... per doz. 11/8
$\frac{1}{2}$ -lb. Jars.....	" 7/0	..... " 42/0	1-oz. Jars.....	" 8/4	..... " 6/3
$\frac{1}{4}$ -lb. Jars.....	" 7/3	..... " 21/9	$\frac{1}{2}$ -oz. Jars.....	" 8/8	..... " 3/8

QUOTATIONS FOR EXTRACT IN "BULK" ON APPLICATION.

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C.

6 lbs. Carriage Free.



A GOOD LINE IN DYES  
WILL ALWAYS  
COMMAND A SALE.

DO NOT DELAY! WRITE AT ONCE!!  
And secure a most attractive and saleable Spécialité for  
DISPLAY and WINDOW DRESSING.

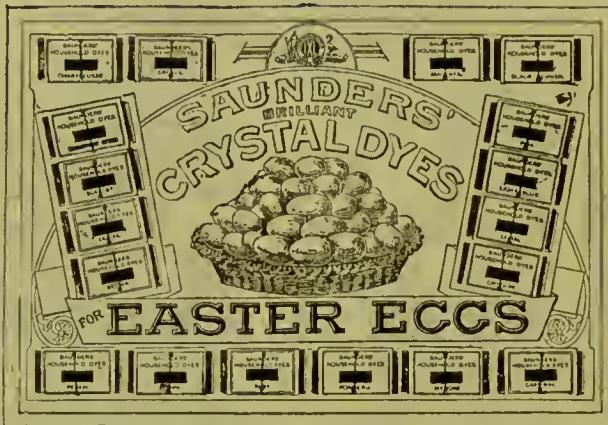
## SAUNDERS' BRILLIANT DYES FOR EASTER EGGS.

### LIST OF PRICES.

1d. packets, 7/- per gross.  
Display Card containing 18 doz.  
assorted, for 10/-.

### COLOURS OF DYES.

BLACK	CHARTREUSE
BROWN—	CLARET
LIGHT	CORAL
DARK	CREAM
GOLDEN	CERISE
BLUE—	CRIMSON
LIGHT	CRUSHED
DARK	STRAWBERRY
NAVY	FAWN
ELECTRIC	GOLDEN
BRONZE	YELLOW
BUTTERCUP	GREEN
CANARY	GREY
CARDINAL	



### LIST OF PRICES.

3d. packets, 21/- per gross.  
Display Card, containing 6 doz.  
assorted, for 10/-.

### COLOURS OF DYES.

LAVENDER	PURPLE
LILAC	ROSE
MAGENTA	RUBY
MAUVE	SAFFRON
MARONE	SCARLET
MOSS	SLATE
ORANGE	STRAW
PEACH	SULTAN RED
PINK	TABAC
PLUM	TERRA COTTA
PONCEAU	TUSCAN
POPPY	VIOLET
PUCE	YELLOW

Specimen of Display Card worked up in brilliant colours—the Dyes attached—the whole in a handsome Cilt Frame.

**THERE IS NOTHING LIKE IT IN THE TRADE.**

A Sample Card of 1d. or 3d., containing the most saleable colours, sent carriage paid on receipt of Postal Order to the value of 10s. 6d. Money returned if the Goods are not approved of.

## ANILINE DYES IN PACKETS.

SPECIALLY PREPARED FOR CHEMISTS' TRADE.

EVERY COLOUR GUARANTEED—BEING THOROUGHLY TESTED BEFORE BEING SENT OUT



Specimen Card of Dyes for Silk or Wool.



Illustration of our Desk-shape Mahogany Count r Stock-ease, with Coloured Tablet in front and Drawer at back—price 54/- net, stocked with Dyes, any colour, equal to 4 gross 1d. and 1 gross 3d. size.



"Lancashire Dyes" for Cotton. Specimen Card of Registered

Litho. Card—Red, Blue, and on Dark  
Blue Ground—Varnished.

We are prepared to give Special Quotations (for quantities of 10 gross and upwards) for packed dyes with Customer's own Name and Address on.

### PRICE LIST OF ANILINE DYES IN BULK.

ALL COLOURS WARRANTED TO BE EQUAL IN EVERY RESPECT TO WHAT WE PACK.

Please Compare the Prices. 1/2-lb. Sample Tins sent per post.		Packed in 1/2-lb., 1/4-lb., and 1-lb. Decorated Metal Stock Boxes.	
Black .....	9/-	Cardinal.....	6/-
Black .....	5/6	Claret .....	6/6
" (Bismarok) .....	7/-	" Opt. ....	8/-
" (Light) .....	4/6	Cream .....	7/-
" (Dark) .....	6/-	Crushed Straw- berry.....	8/-
Blue .....	12/-	Cerise .....	6/-
" (Light) .....	10/-	Crimson .....	7/-
" (Dark) .....	9/-	Golden Yellow ..	10/-
" (Navy) .....	9/-	Green .....	6/-
" (Electric) .....	15/-	in Crystals .....	18/-
Canary .....	7/-	Olive .....	7/6
		" Poneend .....	" Opt. ....
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Telephone Number, 1852.

Telegraphic Address—CHEMICOUS LONDON.

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## ADTD &amp; MINELS

## AGNCIES ABROAD

Apollinaris (Hungarian Aperient Water, Diamond Mark, Friedreichhall Apollinaris)  
Barnett and Foster Chemists' Aerated Waters Association, Ellis (Bathin)  
Hassall and Co. (Citric Acid Phospho)  
Hay, W.  
Idris and Co.  
Jewsbury and Brown  
Kinmonth and Co.  
Levico Springs Co. (Limited)  
Mills and Co. (Bourns)  
Taylor, T. and F. J.  
[See GINGER ALM.]

## DITTO PLANT

[See SYPHONS and ESSENCES.]  
Barnett and Foster  
Bratty and Hinchills (Ld.)  
Egrot  
Fawcett and Co.  
Fevre, T.  
Gnert Frères  
Prudon and Dubost  
Tyler, Hayward, and Co.

## ACETIC ACID

Dunn and Co.  
Fuent Bros.  
Morris and Gallard (Salts)

## ALKALOIDS

Howards and Sons (Cinchona), Smith, T. and H. & Co.

## BAKING POWDER

Dunn, W. G., and Co.  
Goodall, Backhouse & Co.  
BEESWAX

Bowdler, W. H., and Co.

Luneberger Wax Bleaching Works

## BICARB. SODA

Brunner, Mond and Co., Lim.  
Howards and Sons

May and Baker

## BISMUTH. PREP.

Hearon, Squire and Francis  
Hewlett and Sons

Howards and Sons

May and Baker

Symes and Co.

White, Alfrsd, and Sons

## BLOOD MIXTURE

Lincoln and Midland Counties Drug Co.

## BOOKS

Churchill, J. and A.

Hargreaves, Dr.

Lewis, H. K.

Mutor, Dr.

Squires and Sons

## BOTANIC BEER

Newball and Mason

## BRUJERAS

Dukas and Co.

Fordham, W. B., and Sons

(Lim.)

Kent, G. B., and Sons

Moseley, David and Sons

## BANDAGES

Bally, W. H., and Sons

Robinson and Sons

Seabury and Johnsons

## BOTTLE CAPPING

Bosch, J., and Sons

## BOTTLES

Aire and Calder Bottle Co. (Ld.)

Barnett and Foster

Barratt, B. H.

Bratty and Hinchills (Ld.)

Brett's (Lm.)

Evens, Sons and Co.

Giblerton, H., and Sons

Hearn, E. A., and Co.

Isaacs and Co.

Kilner Bros.

Melin, O. (Stoppers)

Poths, H., and Co.

Sandars, H. G., and Son

Shirley, A. W.

Toogood, W.

Youldon, E.

"W" Brand

## BOXES

Austin and Co. (Cardboard)

Chalmers, W. B.

Owen, J., Jr.

Parmenter, I. W. & Co.

Robinson and Sons

## BUTTER COLR. &amp;c.

Clomonts, S. G., and Co.

Johnsen and Jorgensen

Oldfield, Pattison and Co.

## CAMPHOR

Fuerst Bros.

Howards and Sons

Koen and Ashwell (Horace)

May and Baker

## CAPSULES

## (METALLIC)

Bettis and Co.

Brooks, F. and Co.

Melin, O. (Machin)

Sanders, H. G., and Son

## CAPSULES

Dsonal, J. (Medicinal)

Duncan, Flockhart and Co.

Evane, Sons and Co.

Hooper, B., and Co.

Maw, S., Son and Thompson

## CSCRA SAGRADA

Duncos, Flockhart and Co.

Evane, Sons and Co.

Farris and Co.

Moss, J., and Co.

Squire and Sons

## CASTOR OIL

Fuerst Bros.

## CATALOGUE

Evans, Sons and Co.

Maw, Son and Thompson, S.

May, Roberts and Co.

Sanger and Son

Schutte, F., and Co.

Thompson, Walters, Hole & Co.

## CEMENT

Kay Bros. (Lm.)

## CHALK PRECIP.

Dunn and Co.

Levermore, Aug., and Co.

White, A., and Sons

## CHEST PROTCTS

Bally, W. H., and Son

Evans, Sons and Co.

Liverpool Lint Co.

Sanger and Sons

Schutte, F., and Co.

Thompson, Walters, Hole and Co. (Limited)

Wood, Vincent

**CHEMICALS**

Andreas, Oscar, and Co.  
Boehringer, C. F., and Sohne  
Bramwell and Son  
Brunner, Mond and Co., Lim.  
Bush, W., Son and Co.  
Dunn and Co.  
Fletcher Fletcher and Stevenson  
Fuerst Brothers  
Goodall, Backhouse and Co.  
Greath, E. W., and Co.  
Hill, A. S., and Son  
Hodgkinsons, Treacher and  
Clarke  
Howards and Son (Pharm.)  
Kuhn, B.  
Levermore, A., and Co.  
Lofthouse and Saltmer  
Loreus, H.  
May and Baker  
Morris and Gullard  
Moss and Co.  
Pronk, Davis and Co.  
Stern, G. and G. (Pmmline)  
Smith, T. and H., and Co.  
Type and King  
White, A., and Sons  
Emmermann, A. and M.

**CHLORIDE OF GOLD**

Rowland, L.  
**CHL. OF POTASH**  
Burroughs, Wellcome and Co.  
Hooper, B., and Co.

**CHLORIDE OF LIME**

Government Sanitary Co.  
National Chemical Co.

**CHLORODYNE**

Davenport (Brown's)  
Towle, A. P., and Son

**CHLOROFORM, &c.**

Duncan, Flockhart and Co.  
Macfarlan, J. F., and Son  
Smith, T. and H., and Co.  
Wright, Layman and Umney  
Zimmermann, A., and Son

**CITRIC ACID**

Hassall (Phospho)  
**COCAINE - HYDRO.**

Boehringer, C. F., and Sohne  
Howards and Sons

**COCA WINE**

Ambrecht, Nelson and Co.  
Evans, Sons and Co.  
French Hygiene Soc.

**COCOA & CHOCOLATE**

Cadbury Bros  
Fry and Sons  
Bowntree and Co.  
Van Houten's Cocoa

**COD-LIVER OIL**

Allen and Hanbury  
Burroughs, Wellcome and Co.  
Evans, Sons and Co.  
Hill, A. S., and Son

Mother, P.  
Lofthouse and Saltmer

Oppenheimer Bros. and Co.  
Smith, T. J.

Woolley, Sons and Co.

Wright, Layman and Umney

**COFFEE**

Symington and Co. (Coffees  
Essences)

**COLDS, TUBERS**

Botts and Co.  
Brooks, Peel and Co.  
Sanders, H. G., & Son

**COMP. MEDICINES**

Allen and Hanbury  
Blyton, Astley and Co.  
Burroughs, Wellcome and Co.  
Hooper, B., and Co.

Leo and Co.

Wyleys and Co.

**CONFECTORY**

Blyton, Astley and Co.  
Gibson, E., and Sons  
Kerfoot, T.

Fascall, J.

Warrick Brothers

**CONCENT. LIQS.**

Evans, Sons and Co.  
Fletcher, Fletcher and Stevenson

**CORN CURES**

Seabury & Johnson (Plasters)  
Thompson, M. F.

Younk, H.

**COTTON WOOL**

Hayes, G., & Co. (Absorbent)  
Robinson and Sons (Absorbent.)

Sanger, J., and Sons

Seabury and Johnson

**CRUSHED LINSEED**

Munford, G. S.

**DENTIFRICES**

Fentiman & Co.  
Jewsbury and Brown

Kennedy, The, Co.

Newberry and Sons

Reed, H.

Stinton, O., and Co.

Thompson and Capper

Warrick Bros.

Woods, W. (Aerosol Nut.)

Wright, C., and Co.

**DISINTEGRATORS**

Carter, J. H.

**DOG MEDICINES**

Spratt (Patent)

22

**DISINFECTANTS**

Government Sanitary Co.  
Hamilton and Co.  
Jeyes' Sanitary Compounds  
National Chemical Co.  
Seabury and Johnson  
Sanitas Co.

**DRUGGISTS' SUM.**

Ayrton and Saunders  
Bally, M., and Co.  
Harcoll and Sons (Limited)  
Davy, Humphrey, & Co.  
Evans, Leeser and Webb  
Evans, Sons, and Co. (Savars)  
Gibbertson, H., and Sons  
Hill, A. S., and Son  
Hookin, Wilson and Co  
Iris and Co.  
Kay Bros, Ltd.  
Lynch and Co.  
Marriot, E., and Co.  
Maw, Son and Thompson, S.  
May, Roberts and Co.  
Rankin and Sons (Cork Mats)  
Sanger and Sons  
Schutze and Co.  
Thompson, Waiters, Hole & Co  
Toogood, W.  
Wood, Vincent

**DYES**

Ayrton and Saunders

**EAU DE COLOGNE**

Farina, J. M.

**ELASTIC HOSIERY**

Wood, V.

**ELECTRIC APPAR.**

Berry, F. H.  
Darton, F., and Co.  
Gent and Co.  
Orme and Co.

**EMBROCATION**

Eitman, Sons and Co.

**ENAMEL**

Fordham, W. B., and Sons

**ENEMAS**

Bally, W. H., and Son  
Evans, Sons and Co.  
Ingram and Son  
Lynob and Co.  
Sanger and Son  
Schutze, F., and Co.

**ENGRAVERS**

Barker, W., and Son  
Corssen, J. E. (Glass)

**ESSENCES**

Beckett, W.  
Brathy and Hinchliffe (Ld.)  
Burgoyne, Burbidges and Co.  
Bush, W. J., and Co.  
Cummock, J.  
Duckworth and Co.  
Pitrimmons and Fearnley  
Flockhart, Backhouse and Co.,  
Hay, W.  
Idris and Co.  
May and Baker

Oldfield, Pattinson and Co.

Stevenson and Howell

Tyler, P. (Anchovies)

Woolley, Sons and Co

**ESSENTIAL OILS**

Bush, W., Son and Co.  
Cooking (Japan Peppermint)  
Cummock, J.

Duckworth and Co.

Evans, Sons and Co.

Fitzsimmons and Fearnley

Fratelli De Pasquale and Co.

Hodskins, Treacher and

Clarke

May and Baker

Stevenson and Howell

Symes and Co.

Tombarel Frères

Treatt, R. C.

Warrick Brothers

Wright, Layman and Umney

Vogt, G., and Co.

**ETHER**

Clandon, G.

Duncan, Flockhart and Co.

Howards and Son

May and Baker

White, A., and Sons

Woolley, Sons and Co.

Wright, Layman and Umney

**EUCALYPTUS**

Dowles R. I. P. Co.

Tucker, J., and Co.

**EXTRACTS, FLUID**

Aitken and Haubury

Barber, G., and Co.

Burgoyne, Burbidges and Co.

Evans, Sons and Co.

Fletcher, Fletcher and Stevenson

Hearon, Squire and Francis

Hooper, H., & Co.

Moss and Co.

Potter and Clarke

Wright, Layman and Umney

**EXTRACT, MEAT**

Australian Meat Co.

Bovril (Limited)

Brand and Co.

Brown, H., and Co.

Dennayan's Peptone Co.

Liebig's Co.

"Maggi!"

**FEEDING BOTTLES**

Bremits, B. and Co., Ltd.  
Evans, Sons and Co.  
Hearst, H. A., and Co.  
Hookin, Wilson and Co.  
Klinke Bros.  
Lynch and Co.  
Marriot, E., and Co.  
May, Roberts and Co.  
Thompson, Walters, Holt and  
Co. (Limited)  
Toogood, W.

**FILTERING**

Douton and Co.  
Lipascombe and Co.  
Sifted Carbon Filter Co.

**FLY PAPERS**

Ford, Shapland and Co.

**FOOD (Infants' & Invalids')**

Allen and Hanbury  
Baelz, H., and Co.  
Brand and Co.  
Brass, J. L. (Charcoal Biscuits)  
Goodall, Backhouse and Co.  
Hearon, Squire and Francis  
King, F., and Co., Ltd.  
Liebig's Co.  
"Maggie!"  
Mottershaw & Co. (Benger)  
Nestle, H.

Food

**GINGER ALE**

Hay, W. (Essences)  
Klinke Bros.  
Mills, B. M., and Co.

**GLYCERINE**

Fink and Co.

Fuerst Bros.

Price's Candle Co.

Van Geelkerken and Co.

**GRANULAR PREP.**

Curtis and Co.

Hearon, Squire and Francis

Hill, A. S., and Son

Kerfoot, T. (Sulphate)

Murray, Sir James, and Son

**GUM**

Pink (Arable, &c.)

Deutschmann & Woroneck

Hyde, Nash and Co.

Knight and Co.

Levermore A., and Co.

Macnair, J., and b., and Co.

Pronk, Davis and Co.

**GUTTAPERCHA**

Duncan, Flockhart and Co.

**HAIR PREP.**

Brodie, J. (Imperial Hair Dye)

Cheesbrough Mfg. Co.

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Roseine Manufacturing Co.

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Holloway's  
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The above are the leading Essences, and to these the special attention of customers is asked. Those who desire greater variety will find in "Newberry's Catalogue" a more extended list.

Berdoe's Perfumes, in Handsome Show Bottles for the Counter, Rose Cut Steppers, Vitrified Opal Shield Labels with Gold Border and Black Letters, from 1s. 6d. each.

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Absolutely Genuine Paraffinum Molle of the very Purest Form, and we claim that it is superior to Vaseline.

Packed in Tins, 1, 4, 10, 14, 28, 56, and 112 lbs.

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Universally adopted by the Medical Profession for

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FOR  
**EXTERNAL & INTERNAL IRRITATION**  
OF EVERY KIND.

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**“EDIBLE SALVO PETROLIA”**

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MATCHLESS FOR THE COMPLEXION.

A Marvellous and Unique Preparation for Softening, Toning, and Beautifying the Skin.  
INVALUABLE for removing Spots, Sunburns, Blotches, and all Imperfections.

IMPARTS A VELVETY SOFTNESS AND BLOOM.

Renders it Beautiful to the Eye, and deliciously soft to the Touch. Can be used with the most perfect safety to any child or infant. In Bottles, post free, 2s. 6d., 4s., 7s., and 10s. 6d., or Sample Bottles, post free, 1s. 3d. direct from the Proprietor,

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*And of all Chemists throughout the World.*

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Ladies once using this Preparation will never be without it.



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SOLE AGENTS FOR DR. WARLOMONT'S CALF VACCINE.

Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.  
HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes, two-thirds full, 1s. 8d. each; Tubes one-third full and Lancet-charged points, 1s. each; Pin-points, 1s. 1d. each. Eighteen charged Small Points, 5s. Tubes, two-thirds full (same as those mentioned above, but without source), in quantities for export, £5 per 100 Tubes. Pin-points uncharged, 1s. per dozen. Vaccine Injectors, 1s. 8d. each, including postage. Vaccinations by appointment. P.O.O.'s (Including postage, and crossed London and Westminster Park) with orders, payable to

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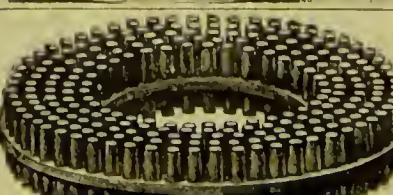
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**BRUSHES**

*The Latest Novelty is our*  
RUBBER  
Complexion Brush.

Price 3s. 6d. each,  
PAKED IN A NEAT BOX.  
Entirely does away with poisonous cosmetics and face-washers. Used in the ordinary daily ablutions, with a little soap, it makes the skin beautifully fresh, soft, and smooth, and effectively eradicates all blemishes, blotches, pimples, &c. Used as a shampoo brush, gentlemen will find it a most useful adjunct to the toilet, as it entirely removes scurf and dandruff. Mothers and nurses will find it invaluable for bathing the delicate skin of infants and children.

Prices—Bath Brushes 6s.; Toilet Brushes, with Handles, 1s. & 2s. each; Tooth Brushes, 10d. & 1s.

Bailey's New  
Rubber Teething  
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Is perfectly tasteless, and so constructed that the flattened teeth serve to expand the skin of the gums, softening the latter, and aiding the coming tooth without irritation. Price 5d.

*Of all Chemists & Dealers in Toilet Goods or direct from the Manufacturers.*

DAVID MOSELEY & SONS,  
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# SACHET POWDERS

The interest attaching to the increased demand for dry perfumes makes the subject just now of special importance. On account of the limited demand heretofore there has been no active competition in the manufacture of Sachet Powders. This fact will in a great measure account for the wide difference noticeable in the quality put out by different makers. The greater proportion of these powders contain only the ordinary showy filling of rose leaves, fragrant woods, buds and roots, which have little more life than dried autumn leaves when compared to a fragrant perfume. Can Sachet Powders be made to give as good satisfaction as the Extracts? Yes; if you know how to use them. Work boxes, handkerchief and glove cases may be lined with these powders, so as to give off their perfumes indefinitely. Kid gloves and dressed leather of all kinds may be more delightfully perfumed with Sachet Powders than with any of the liquid perfumes, and, too, without the risk of soiling. Sealskin, sable, and other fur may be given a delicate perfume with these powders. It often happens that the pelts of fine furs are not perfectly dressed, and in time acquire a peculiar odour, especially when subjected to dampness. Sachets, placed amongst such furs, will permanently improve and sweeten them. How many odours is it advisable to make? Not over a dozen. Why? Because the range of material is limited, and a few well-combined odours will meet the public demand even better than a long list, many of which are but reproductions of the same odour. Druggists should carry not less than six odours, in 8-ounce or 16-ounce glass-stoppered bottles, for supplying those who do fancy work, and others wanting them in bulk. Then a few dozen packets in satin, lettered in gilt, for placing in trunks and drawers. The six odours most popular are White Rose, Jockey Club, Violet, New Mown Hay, Heliotrope, and Frangipanni.

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The following are put up in glass-stoppered bottles.—One ounce, in 2-ounce bottle, 4 dollars per dozen.  
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Catalogue and New Supplement sent on application.

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"NOT TO KNOW THESE ARGUES ONESELF UNKNOWN."

WARRICK Real Heliotropes \* \* \*

BROTHERS' \* \* \* Real Roses

18 Old Swan Lane,  
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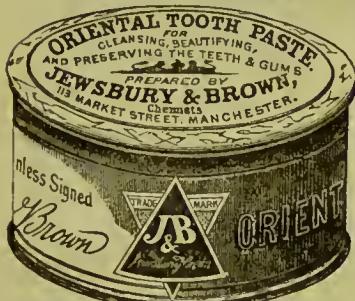
\* DELICIOUS + CACHOUS. \*

3/- per lb., Splendidly Labelled. 4/- per dozen boxes, Gold Embossed on Calf.

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# ORIENTAL TOOTH PASTE.



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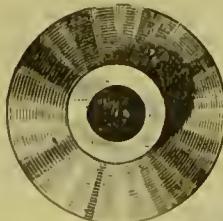
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[4]

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# METALLIC COLLAPSIBLE TUBES FOR PAINTS,

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[3]

ESTABLISHED 1820

## NOTE REDUCED PRICES OF QUININE PILLS.

LIST OF "MCK. & R." CAPSULED PILLS  
OF THE BRITISH PHARMACOPÆIA AND OTHER STANDARD AUTHORITIES.McKESSON & ROBBINS,  
WHOLESALE DRUGGISTS AND MANUFACTURING CHEMISTS,  
ESTAB. 1833.] NEW YORK, U. S. A. [ESTAB. 1833.

Supplied by the Principal Wholesale Houses in the Trade throughout Great Britain and Ireland.

The reputation of Gelatine-Coated Pills has been created by our manufacture.	DOZ. BOTTLES containing 25 PILLS.		DOZ. BOTTLES containing 25 PILLS.	
	100 PILLS.		100 PILLS.	
Aloin .....	5/	16/	4/	18/
" .....	8/	20/	1 gr.	18/
" .....	7/	24/	2 gr.	18/
" .....	11/	40/	3 gr.	28/
Compound .....	7/	24/	4 gr.	34/
" Compound and Strychnine .....	7/	24/	5 gr.	42/
" Strychnine and Belladonna .....	7/	24/	1/2 gr.	18/
" or Aperient, No. 1 (Clark) .....	9/	32/	1 gr.	18/
" No. 2, No. 3, No. 4 .....	7/	24/	2 gr.	20/
Morphine Muriate .....	1/2 gr.	7/	3 gr.	28/
" Narcotic Extracts (Brown-Sequard) .....	15/	56/	4 gr.	36/
			5 gr.	44/

Being completely sealed, all substances are perfectly preserved from oxidation.

PRICES REDUCED July 27, '89.	DOZ. BOTTLES containing 25 PILLS.	
	100 PILLS.	
Quinine, Bisulphate .....	4/	18/
" Sulphate .....	2 gr.	18/
" " "	3 gr.	28/
" " "	4 gr.	34/
" " "	5 gr.	42/
" " "	1/2 gr.	18/
" " "	1 gr.	18/
" " "	2 gr.	20/
" " "	3 gr.	28/
" " "	4 gr.	36/
" " "	5 gr.	44/

A Complete List of Formulas and Prices will be mailed promptly on application.

In ordering, be careful to specify "MCK. &amp; R." CAPSULED PILLS.

Originated 1870, by McKESSON & ROBBINS, New York, U.S.A. Merchants, Shippers, and the Wholesale Houses in the Trade are supplied by Messrs. S. MAW, SON & THOMPSON, 7 to 12 Aldersgate Street, London, E.C.; Messrs. BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.; and Messrs. HOCKIN, WILSON & CO., 38 Duke Street, Manchester Square, London, W.

## TOWLE'S CHLORODYNE

In COUGHS, ASTHMA, BRONCHITIS, INFLUENZA, &c., its effects are truly wonderful, immediately relieving the tightness of the Chest, allaying irritation of the Throat, promoting Expectoration, and speedily and effectually subduing the Cough.

It soothes the weary aching of CONSUMPTION, relieves the harassing Cough, and often prevents those sleepless nights so trying to the sufferer.

In CHOLERA, DIARRHœA, DYSENTERY, &c., it has proved itself a most valuable specific, quickly relieving the pain and spasms, and seldom failing to check the disease; for which property, as well as for its value in Sea Sickness (for which it is the best remedy known), it should be an indispensable article in every emigrant's outfit.

## TESTIMONIALS.

"Superior to every other I have tried."

F. H. GREEN, M.R.C.S.  
Rochdale Dispensary.

"Peculiarly serviceable in Bronchial, Spasmodic, and Neuralgic Affections."

ALFRED ASPLAND, F.R.C.S.,  
Consulting Surgeon to Ashton Infirmary.

"I have used it largely in Spasmodic and Painful Affections, Bronchitis, and Neuralgia. It has the property of being readily combinable in ordinary prescriptions—an advantage over all similar preparations."

R. TRAFFORD WHITEHEAD, M.R.C.S.

A Surgeon writes:—"In Diarrhoea, Colic, Ague, Spasms, I have found it relieve more pain and cause more joy than any other article that can be named. Has proved itself a specific against sea-sickness."

Island Bridge, Duhill.

"I am pleased to say that although I have not finished a quarter of the bottle (2s. 9d.) the pain has left my chest, and the cough is almost well."—J. BROWN.

Immediately Relieves  
COUGHS,  
CONSUMPTION,  
ASTHMA,  
BRONCHITIS,  
TIC,  
SPASMS,  
HYSTERIA,  
DIARRHœA,  
DYSENTERY,  
CHOLERA,  
CRAMP, AGUE,  
Sea-Sickness, &c.

## REVISED PRICE LIST.

	Retail. s. d.	Per doz. £ s. d.
Towle's Chlorodyne ..	1 1/2	0 8 6
Ditto ..	2 9	1 3 0
Ditto (3 fluid oz.) ..	4 6	1 16 0
Ditto (8 " ) ..	11 0	4 13 0
Liq. Chlorodyne (Original and only Genuine) 1/2 lb.	2/6 each	
Ditto ditto	4/6 "	
Ditto ditto	8/- "	
Wm. C. Webster Quarts (6 lb.) 7/6 per lb., bottles free.		
Towle's Antibilious Pills ..	1 1/2	0 8 6
Ditto ..	2 9	1 3 3
Towle's Chlorodyne Lozenges } ..	{ 0 7/	0 5 6
Ditto Jujubes } ..	{ 1 1/2	0 8 0
Ditto in bulk, bottles free, containing 1 lb., 2/9 each.		
Ditto ditto 1 lb. 10 oz., 4/6 "		
Ditto ditto 4 lb., 10/- "		
N.B.—The Commissioners will allow them to be sold by the retailers without further duty, provided they are simply wrapped in paper, and net enclosed in a box, bottle, or packet.		
Thornton's Celebrated Toilet Cream ..	1 0	0 9 0
Ditto ..	1 6	0 14 0
Ditto ..	2 6	1 4 0
Amboline (Registered Trade Mark) ..	2 6	1 4 0
The Thornton (Red) Lotion (Stamped) ..	2 6	1 4 0
Thornton's Paragon Hair Wash ..	1 0	0 9 0
Ditto ..	2 6	1 4 0

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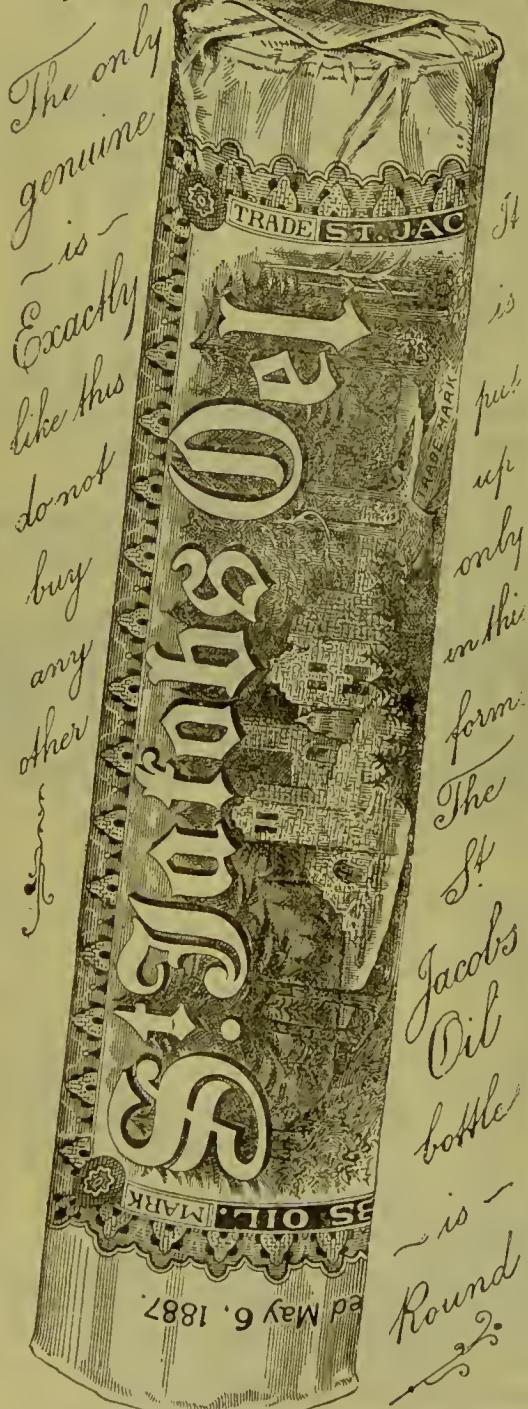
£5 worth (assorted or otherwise) Carriage Paid.  
7 lb. Lozenges and upwards stamped with Chemist's own name, free of charge.

A. P. TOWLE & SON.

75 BACK PICCADILLY,  
MANCHESTER.

# IMPORTANT NOTICE.

## REMEMBER



LOOK ALSO FOR THE SIGNATURE OF

*The Charles A. Vogeler Co.*

Our attention has been called to the fact that certain unprincipled persons are selling in the Market Places, in some of the Provincial Cities and Towns, receipts purporting to be true Formulas of ST. JACOBS OIL and other standard Proprietary Medicines. As none of these Formulas correspond at all with the ingredients which enter into the manufacture of ST. JACOBS OIL, and the selling of same purporting to be a correct Formula of ST. JACOBS OIL, is a criminal offence, we will thank any Chemist to furnish us the names and addresses of such people, or any information connected therewith, which favour we shall not only appreciate but will duly reciprocate, if the evidence so such as will enable us to convict the persons named.

We trust that all Chemists who appreciate fairness in Trade, will assist us in bringing such parties to justice.

THE CHARLES A. VOGELER CO.

45 FARRINGDON ROAD, E.C.

# A READY TEST.

LONDON.]

MARCH 15.

[1890.

When we consider the spirit of imitation seriously, it is a good plan to collect the fullest amount of information relating to the substance in question and compare facts.

The Kepler Malt Extract has acquired an unparalleled notoriety as a perfect preparation of its kind, chiefly on account of its richness in diastase (the vegetable ptyalin), this ferment being the resulting product by decomposition of the gluten which exists in the barley. The dextrin in the Kepler Malt Extract is also an important factor in the treatment of disease. If, as should be the case, our specimen of Malt Extract has undergone no alcoholic fermentation, *dextrin* will be present in large quantities. This body, which is a poly-saccharate possessing the formula  $(C_6 H_{10} O_5)_x$ , constitutes nearly one-third of the result of the action of diastase upon starch. Probably at least three different dextrins are thus produced, viz., amido-dextrin, erythro-dextrin, and achroo-dextrin. These bodies are incapable of direct fermentation, but in the presence of diastase they undergo alcoholic fermentation with yeast.

Malt Extract which has undergone fermentation leaves little dextrin behind, the whole having been converted first into *glucose*, and then partly into alcohol.

The physiological action of malt dextrin is to stimulate gastric secretion, and so assist debilitated digestive functions in the performance of their duty.

Proteids exist in malt chiefly as albumen, vegetable casein, &c., and are considered to be an important factor in repairing defective nutrition.

The Kepler Malt Extract contains one-eighth part of such substances, either unchanged or as peptones.

**MINERAL MATTERS.**—These are in the form of phosphates derived from the grain; the Kepler Malt Extract contains 3 per cent. of these matters. We have, therefore, in the Kepler Extract of Malt a perfect concentrated tonic food, suitable for use in all cases of mal-assimilation and mal-nutrition.

## TEST.

When a teaspoonful of the Kepler Malt Extract is mixed with a dish of warm thick oatmeal porridge or arrowroot, its digestive activity is immediately apparent by the food liquefying and the starch being transformed into assimilable sugar. If such digested food be then tested for sugar by Fehling's test, the sugar reaction will appear markedly manifest. The best "appearance" test for a good Malt Extract is its adhesiveness.

If alcoholic fermentation has been carried on, this adhesive principle (dextrin) has been converted into grape sugar at the expense of the diastase.

It is well, therefore, to avoid *cheap malt extracts*, for in these the bulk of extract has generally been the first consideration, and digestion has been carried on in the wort until the whole of the starch, dextrin, and proteids are converted into soluble saccharino products. This, then, is the reason why cheap malt extracts can be made. They are generally found of no more benefit as a food or digestive agent than treacle.

Kepler Extract of Malt and Kepler Extract of Malt with Cod Liver Oil (Kepler Solution) supplied to the Trade at 22/- and 38/- per dozen.

**BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON, E.C.**  
ABOVE PRICES SUBJECT TO USUAL DISCOUNT.

## UNGUENTUM LANOLINI (LANOLINE OINTMENT BASE).

On account of its sticky nature, Lanoline was objected to by some physicians, but this objection has now been overcome by the introduction of a Lanoline Ointment base—Unguentum Lanolini—which is applicable wherever, formerly, lard or any other old ointment bases have been used. Its advantages may be summed up as follows:—

1. It never turns rancid.
2. It is grateful to the tenderest skin.
3. It is non-sticky and can be readily washed off.
4. It is aseptic; no bacteria or microbes can live in it, or pass through a thin layer when spread over a fresh wound.

Lanoline (Liebreich) supplied to the trade in 1 lb. and 7 lb. tins at 2s. 8d. per lb. Anhydrous Lanoline (Lanolinum Anhydricum), at 3s. 4d. per lb. Lanoline Ointment Base (Ung. Lanolini), 2s. 2d. per lb. Anhydrous Lanoline Base, 2s. 10d. per lb. Lanoline Cold Cream supplied in pots at 14s. per doz. Lanoline Hazeline Ointment, in pots at 14s. per doz. Lanoline Pomade, in pots at 14s. per doz. Lanoline Toilet Soap, 8s. per doz. Lanoline Eucalyptine Soap, 8s. per doz. Lanoline Pinol Soap, 8s. per doz. Toilet Lanoline, in tubes at 4s. 6d. per doz. Lano Creolin, in tubes, at 9s. per doz.

Above Prices Subject to Usual Discount.

## BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON, E.C.

See *Recommender Notice of Medical Press and Opinions of the leading Dermatologists.*

# WRIGHT'S

Detergents, acting for four hours, arrested future growth."

Of all Druggists, Wholesale and Retail, throughout Great Britain, Ireland, and Colonies.

# LIQUOR

From the *Lancet*, Dec. 22, 1886:—"In our hands it has been a most effective agent in skin diseases, especially of the chronic eczemas class, and one class of psoriasis which had resisted all other kinds of treatment speedily got well under the application of the *Liquor Carbonis Detergens*. We esteem it a very valuable addition to our list of skin remedies."

1871:—"We have tested it, and can affirm its value as a detergent agent. We consider the Liquor is an article of great utility."

Kept in stock and sold by all Druggists (Wholesale and Retail) throughout the United Kingdom and Colonies. PROPRIETORS—

W. V. WRIGHT & CO., 48 Southwark Street, LONDON.

# CARBONIS

DETERGENS.

Extract from the Proceedings of the Royal Society of Edinburgh:—"Experiments on the Chief Disinfectants of Commerce, with a view of ascertaining their power of destroying the spores of the 'Anthrax Bacillus,' by a Medical Officer of Health and Public Analyst. A 10 per cent. solution of Liquor Carbonis Detergens, acting for four hours, distinctly retarded growth of Anthrax, for the spores, whether in gelatin-pork or in the broth, did not commence developing for 24 hours. Undiluted Liquor 'Carbouli Detergens,' acting for four hours, arrested future growth."

The Practitioner of September, 1881:—"Eczema connected with varicose veins of the leg—also Pruritus Seroti, Labiorum, and Ani—is best relieved by weak tarry lotions, one of the best of which is Wright's *Liquor Carbonis Detergens*."

P. McLEOD, Colonel R.A., Inspector-General of Ordnance, Ordnance Office Madras, writes Sept. 10, 1887:—"I can certify that 'Liquor Carbonis Detergens,' has cured me of a PSORIASIS of 21 years, incurred in Burntall, after every effort of such an able skin doctor as Sir Erasmus Wilson had failed."

From the *Medical Times and Gazette* Jan. 18, 1867:—"We have more than once called attention to the value of this remedy in chronic eczema."

From the *British Medical Journal*, Sept. 22, 1867:—"We have more than once called attention to the value of this remedy in chronic eczema."



THE GREAT VEGETABLE BLOOD PURIFIER  
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KNOWN AND APPRECIATED THROUGHOUT THE CIVILIZED WORLD. ITS SUCCESS IN THE TREATMENT OF ALL DISEASES THAT RESULT FROM OLD BLOOD TAINT OR BLOOD POISON HAS BEEN UNPRECEDENTED, THOUSANDS WHO HAVE BEEN GIVEN UP AS HOPELESSLY DISEASED, HAVING BEEN HEALED AND MADE HAPPY BY ITS HEALTH-GIVING PROPERTIES. IT CURES SCROFULA, ECZEMA, RHEUMATISM, OLD SORES, CANCER, CATARRH, CONTAGIOUS BLOOD POISON, &c AND CONTAINS NO MERCURY, IODIDE OF POTASH, ARSENIC, NOR ANY OTHER POISONOUS DRUG. Books on Contagious Blood Poison, and on Blood and Skin Diseases, posted free.

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Cheques or Postal Orders should be payable to EDWARD HALEY, and crossed MARTIN &amp; CO.

Supplied regularly to every member of the following Societies, who have adopted THE CHEMIST AND DRUGGIST as their official organ:—

The Pharmaceutical Association of New Zealand.

The Pharmaceutical Society of Queensland.

The Pharmaceutical Society of South Australia.

The Hobart Chemists' Association.

The Launceston Pharmaceutical Association.

South African Pharmaceutical Association.

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

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## CIRCULATION TO MERCANTILE FIRMS.

WE shall aim to send copies of our next week's issue (March 22) to every firm in the United Kingdom who export any kind of druggists' goods. We want all such houses to keep THE CHEMIST AND DRUGGIST on file as a guide when filling indentures. It is a little difficult to be sure of having the names of all such merchants, as a good many houses do not ship in their own names, but as nearly as can be our list is complete. Manufacturers of specialties and of all druggists' goods should be careful to have their announcements in that important issue.

## POST-CARD COMPETITION FOR MARCH, 1890.

NAME on a post-card the six most popular prescribers in the United Kingdom.

The usual prize of one guinea will be awarded to the competitor whose list comes nearest to the general consensus, but in the event of several forecasting the exact result we reserve the right to divide the prize.

Competitors must be subscribers or their employés. No

cards will be accepted for competition which reach us after March 31.

### SPECIAL NOTICE.

WE have announced previously that separate lists for different parts of the United Kingdom might be sent in. There seems to be but little inclination to take advantage of this proposal, and as it only creates confusion, we cancel that part of the competition. The prescribers named on every post-card will therefore be taken as being given in the general competition.

## RECENT RECOMMENDATIONS.

MEL ROSE.—E. Daenen, a Brussels pharmacist, states that by the following method he obtains a bright rose-coloured, transparent, and delightfully odorous preparation. Infuse 100 grammes of bruised red-rose petals with 400 c.c. boiling distilled water for six hours. Strain, again infuse for six hours in 200 c.c. of boiling distilled water, and repeat, if necessary, with another 200 c.c. Mix the infusions, and evaporate to 170 grammes, filter, and in the filtrate dissolve 500 grammes of clarified honey, and 330 grammes of white sugar.

INSECT POWDER is, according to a Continental house, adulterated sometimes with the flowers of *Chrysanthemum leucanthemum*; but this should not be difficult of detection, as, according to Unger, true insect-powder yields 6.9 per cent. of ash, whereas the powder of *C. leucanthemum* flowers yields as much as 10.1 per cent. of ash containing manganese, a constituent which is not found in the other.

HELIOTROPE PERFUME.—Mr. E. Campe proposes the following formula in the *Chemiker und Drogist* for a perfume for retail sale:—

Oil of bergamot ..	..	..	..	..	1½ oz.
Vanillin ..	..	..	..	..	8 grains
Tincture of benzoin ..	..	..	..	..	2 drachms
Rectified spirit ..	..	..	..	..	60 oz.
Solve.					

DEPILATORY.—According to *Pharm. Centralhalle* an effective depilatory is made by mixing 2 parts of barium sulphide with 1 part of starch and 1 part of oxide of zinc. The barium sulphide can be made fresh, as required, by mixing powdered barium sulphate with its own weight of charcoal, making into a stiff paste with linseed oil, and forming the mass into a roll like a sausage, which is to be placed in the fire until desintegration is complete. After cooling the mass is to be powdered, and mixed with the starch and oxide of zinc. The depilatory is to be made into a paste with water before use, spread on the skin, and allowed to remain for ten minutes. The success of depilatories greatly depends upon the freshness of the sulphide employed.

PREPARATION OF OXYGEN.—According to Volhard, small quantities of oxygen can be prepared in a Kipp's apparatus by the action of hydrogen peroxide on bleaching-powder. Nitric acid is added in sufficient quantity to neutralise the lime in the bleaching-powder. The oxygen contains a trace of chlorine.

QUININE PILLS.—M. Edmond Sohet recommends in *Bull. Soc. Roy. Phar. Brux* the use of 3 drops of lactic acid to 16 grains of quinine sulphate. This, he says, makes an excellent pill-mass, and the excipient is equally suitable when other ingredients than quinine form part of the pill-mass.

## Metropolitan Reports.

CHEMISTS' ASSISTANTS' ASSOCIATION.—At a meeting on March 20 a paper on "Antipyrine and its Incompatibles," by E. J. Millard and A. C. Stark, will be read.

GUY'S HOSPITAL.—We are informed that Mr. Gladstone has kindly consented to open the new Residential Medical College at Guy's Hospital on Wednesday, March 26, at 3 p.m.

CHEMICAL SOCIETY.—At the meeting on Thursday, March 20, at 8 p.m., Professor Judd, F.R.S., will deliver a lecture on "The evidence afforded by petrographical research of the occurrence of chemical change under great pressures."

STEALING DRUGGISTS' SUNDRIES.—At Dalston Police Court on Thursday, before Mr. Horace Smith, Joseph Steel, aged 14, a warehouse boy, of Valentine Road, Hackney, was charged with stealing a piece of court-plaster, the property of his employer, Mr. Robert Orrock, dealer in druggists' sundries, of Hackney Wick. Mr. Romain, who prosecuted, said Mr. Orrock did not wish to press the case unduly, but from the fact of having lost several articles, menthols, &c., he was obliged to prosecute. Prisoner, who confessed to having stolen stamps, court-plaster, and menthols, was kept in custody for a day, and then cautioned and allowed to go.

## Provincial Reports.

*Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.*

### BIRMINGHAM.

MIDLAND COUNTIES' CHEMISTS' ASSOCIATION.—At the meeting to be held at the Mason College, Edmund Street, on Tuesday evening next, at 8.30, W. B. Featherstone, Esq., M.D. (London), will read a paper on "The Occasional Poisonous Action of Certain Drugs."

ALLEGED HOSPITAL ABUSE IN BIRMINGHAM.—The Mayor has issued a circular stating that the judge of the Birmingham County Court has consented to act as chairman of the suggested committee of inquiry into the alleged abuses of the medical charities of the city. His Worship suggests that four members representing hospitals (not being medical men), one representing the Hospital Saturday Committee, and three representing the medical profession, together with the chairman, should constitute the committee.

A MUNIFICENT GIFT.—Mr. Richard Cadbury, of Moseley Hall, a member of the firm of Cadbury Brothers, has addressed to the committee of the Birmingham and Midland Sanatorium a letter containing an offer of the hall where he resides and a large area of land as a sanatorium for women and children, together with a sum of 30,000*l.* for the purpose of adapting the property to its new use and endowing the institution. There are about 20 acres of land attached to the buildings. In the rules of management proposed it is provided that no stimulants shall be used except under medical orders. Mr. Cadbury's offer has been accepted with gratitude by the committee of the Birmingham and Midland Sanatorium.

### CARDIFF.

Poisoning Case.—An inquest was held on Monday touching the death of Mr. Charles Hibbert, draper, Gorcey-non, who was found dead in one of the bedrooms at the Central Coffee Tavern, Cardiff, on Sunday morning, and it was supposed that he had committed suicide. Mr. E. J. Coleman, chemist and druggist, of 8 High Street, stated that the deceased came to his shop on Saturday afternoon, and asked for rat poison in packets, and refused to take

phosphorous paste. Deceased purchased two packets of "Battle's vermin-killer," and signed himself in the book "W. C. Howard, Cockett, Swansea." Dr. Downing having deposed that deceased died from poisoning, the jury returned a verdict accordingly.

### HANLEY.

TRAVELLING MEDICINE DEALERS.—At the Hanley County Court, on March 12, an action, remitted from a superior court, was heard, by which Arthur Redmondi and Philip Levine sought to recover from the North Staffordshire Railway Company 200*l.* damages, sustained by reason of the company having wrongfully deprived the plaintiffs of the possession of a quantity of patent medicines. The plaintiffs, it was stated, trading as the Cherokee Indian Medicine Company, travelled from town to town for the purpose of vending patent medicines. On July 22 last they consigned by the company's line, for conveyance from Burton to Hanley, seven cases containing their medicines, but finding that a rival, calling himself "Sequah," was already located there, they gave instructions for the cases to be sent on to Longton. The company failed to deliver the medicines at Longton until July 30, in consequence of which the plaintiffs lost the expenses incurred and the profits upon the business they might have done, while the value of the medicine was 17*l.* It was ascertained by the plaintiffs that the railway officials delivered the medicines to their rival "Sequah," who kept them until the close of his visit, and then returned them to the railway company. The defendants had admitted their liability by paying 5*l.* into court. In cross-examination it was elicited that Levine, the co-plaintiff, was now in the service of "Sequah," that Redmondi sometimes appeared at music-halls as an illusionist, and that the wholesale price of the medicine was 2*l.* 12*s.* per gross, or about 5*d.* per bottle. For the defence, witnesses were called to show that while the goods were lying at Hanley station two men called and inquired after them in the name of Redmondi and Levine, and by their instructions the cases of medicine were delivered at the Saracen's Head Hotel. The receipt for the goods was signed by "Sequah," the person who received them saying, when asked by the defendant's drayman if he was Redmondi. "Oh, it's all right; we now sign under the new name." After hearing evidence, the jury gave a verdict for 12*l.*, and judgment was entered for the plaintiffs, with costs.

### LIVERPOOL.

DOCK LABOURERS' STRIKE.—This has now become so general that considerable inconvenience is felt and great loss is occurring to ship-owners and exporters. A considerable quantity of goods, including drugs, are now lying at the docks, some of which are known to have been telegraphed for and are urgently required. The men still hold out, and at present it seems probable that they will not return to work until their demands are conceded.

PHARMACEUTICAL STUDENTS' SOCIETY.—About eighteen months have elapsed since this association was formed, with every prospect of a successful career; over forty members have been enrolled, several excellent papers have been read, and some pleasant social evenings have been spent. The question naturally arises, Why should not such an organisation flourish? Already, however, there are signs of weakness, and on two occasions recently the attendance has been so small that the meetings have been adjourned, last week only about half-a-dozen being present. The president and officers are most energetic, but they cannot alone achieve the objects aimed at; the members one and all should exert themselves to make the meetings such as to encourage those who are able and willing to read papers, &c. The next meeting will be held on Thursday, 20th inst., at 8.30 p.m., when short papers will be read by Mr. A. Shaw, on "The Estimation of Pil. Pot. Permang.," Mr. R. H. Mitchell, on "Cannabis indica," and Mr. J. R. Johnson, on "Carum Ajowan."

CHEMISTS' ASSOCIATION ANNUAL DINNER.—The annual dinner of the members of this association was held on Thursday evening of last week, at the Royal Restaurant, Old Hall Street, Mr. Conroy in the chair. Among

those present were Messrs. T. F. Abraham (vice-president), R. Parkinson (bou. treasurer), J. Bain and J. S. Ward, F.C.S. (hon. secretaries), A. S. Buck, E. Davies, F.C.S., F.I.C., J. R. Day, H. O. Dutton, A. H. Samuel, F.C.S., J. J. Smith, W. R. Smith, W. Wellings, and H. Wyatt (members of the committee). In proposing the toast of the "Liverpool Chemists' Association," the Chairman said that so far they had held their own amongst provincial associations as regarded the papers and communications submitted to the meetings, but the attendance was far from being up to the mark. Financially they were strong and they had little difficulty in obtaining papers for the meetings, but unfortunately many of their members contented themselves with reading the trade journals, which was very disappointing to the authors of the papers. Only one out of every five or six of the chemists in the city and suburbs had joined them, and if they all joined they could set apart a fund for defensive purposes. They had a good and successful public analyst to save them from pitfalls, and he asked each and all of them to try and bring new members. At their meetings the Pharmacy Acts Amendment Bill and the sale of medicated wines had been discussed, and a petition had been sent to the Inland Revenue authorities stating fully their own case, and suggesting an *ad valorem* stamp instead of the wine license. They had also considered the Sale of Poisons and the Railway Rates Bills, and they had vigorously protested against the proposed classification schedules, and he believed that by the action of that association and other bodies they would have considerably reduced railway rates. In these and other matters, while they were looking after their own interests, they were helping other bodies, and they should be supported more generally by the members of their own profession. He deeply regretted the absence of their president, Dr. Symes, through a great bereavement, and expressed his own deep sympathy and the sympathy of those present with him in his trouble. The toast was acknowledged by Mr. H. Wyatt, who heartily approved of the suggestions that had been made by the chairman, and hoped that before long they would be acted upon. The other toasts included "The Pharmaceutical Society," proposed by Mr. J. S. Ward, and responded to by Mr. J. J. Smith; "The Wholesale Trade," proposed by Mr. T. F. Abraham, and suitably acknowledged; "The President" and "The Vice-Presidents and Officers." Between the speeches songs were sung by members of the association and friends. The arrangements throughout were most satisfactory.

#### MANCHESTER

THE SYPHON TRADE.—At the Manchester County Police Court, on Wednesday, two young men named John Gilson and William Rowley were charged with stealing several siphon bottles of soda water by means of a trick. The particulars as divulged by the evidence showed great ingenuity on the part of the prisoners. Their *modus operandi* was to go to a place where no deposit was required on siphons, and after paying for the mineral water in the bottles they took them away. They then visited a shop where a deposit was required, and on pretence that the siphons had been got there, received the deposit money of two shillings on each siphon. This system was carried on successfully for some time, until one of the victims found he had more siphons in his shop than he had sold. Information was given to the police, and the men were arrested.—The stipendiary remarked that the prisoners had evidently been making a good thing out of their illegal trading. Gilson was sent to prison for three months, and Rowley for two months.

#### SHEFFIELD.

THE INACCURATELY-DISPENSED PRESCRIPTIONS.—We hear that four summonses (three for spt. ammon. co. and one for ferri et quin. cit.) have been served on chemists in respect of the recently analysed medicines dispensed from prescriptions sent out by the Health Committee. Cautions have been issued in other cases. It has been arranged, we understand, that the borough analyst shall give a popular lecture, under the auspices of the local Chemists' Society, on the evening of the day on which the cases are to be tried.

"IT'S AN ILL WIND," &c.—Sheffield at present rejoices in having one of the highest death-rates in the kingdom. Influenza and its companions appear to be responsible to a great extent for this. Bronchitis and pneumonia have been particularly prevalent. Medical men agree in saying that they never remember having their hands so full. In the thickly-populated districts most of them are working night and day; the result has been that overwork has laid many of them up, and two have succumbed to pneumonia during the past week. Pharmacists are, naturally, finding some extra pressure.

#### IRELAND.

PHARMACY CLASSES.—The authorities of the Apothecaries' Hall of Ireland announce the resumption of pharmacy lectures on the same lines as heretofore.

A CHEAP ASSORTMENT.—For the modest sum of 3d. a Cork herbalist volunteers to forward curatives for consumption, gout, and ingrowing toe-nails.

CONTRACTS.—Tenders for a year's supply of paints, oils, disinfectants, &c., are invited by the directors of the Dublin, Wicklow, and Wexford Railway Company (March 18).

THE LIMERICK POISONER.—The sentence of death passed recently upon Michael O'Brien, who poisoned his father-in-law at Limerick, has been commuted to penal servitude for life.

WAKENING UP.—A vigorous effort is being made to revive the dormant energies of the Irish Pharmaceutical Chemists' Association, which for some time past has retired into partial obscurity.

STORE PHARMACY.—The Rathmines stores have added a drug and patent-medicine department, and are about engaging a pharmaceutical chemist with a view of opening a compounding-room on the premises.

A CORK COUGH CURE.—Through eating a portion of a belladonna plaster, given to him as a cough specific, a lad named Fooley was last week admitted into the Cork Infirmary. The usual antidotes were successfully applied.

FREEMASONRY FESTIVITIES.—In honour of their newly-installed master, Dr. Alexander Gordon, L.A.H., and councilor of the Pharmaceutical Society of Ireland, the Chapter and Lodge of Israel (126) are giving a grand banquet at Dublin.

A FATAL DRINK.—Through drinking a mixture of spirits of salt and water an army pensioner, named Linehan, has been fatally poisoned at Tralee. He obtained the mixture from Mr. Dowling, the local apothecary, on the pretence of wishing to clean clothes.

A CHEMIST SUES FOR FEES.—At the Court of Queen's Bench last week an application was made on behalf of the plaintiff, Mr. Roulston, chemist, Tyrone, to remit to the local court an action taken to recover 34l. 19s., including the cost of 26 bottles of medicines supplied at 1s. 6d. each. There being no resistance, the motion was accordingly granted.

"BOVRIL" appeared last Saturday in the Dublin Police Court in the person of a law-breaker of that name, whose escapade in "crib cracking" was rewarded with free lodgings in the Government hotel, where it is unlikely he will get any of the beef elixir. The company can take action for infringement of their trade-mark when Mr. B. emerges.

THE PLAN OF CAMPAIGN.—Mr. Morgan M. Dairey, chemist and druggist, a tenant on the Smith-Barry estate, Tipperary, was last week evicted from his establishment for non-payment of rent. The local dispensary premises at Abbey Street were also seized by the landlord, who, it is said, will convert them into a police barracks.—A printed notice has been circulated in Cork warning the people that they must "boycott" such chemists as are known to supply "land-grabbers," police, and other obnoxious individuals.

IRISH DRUG CONTRACTS.—Tenders for a year's supply of druggists' sundries, medicines, drugs, and medical and surgical appliances, are invited on the undermentioned dates by the boards of guardians of the following poor-law districts:—Ballybough Union and adjacent dispensaries.

March 17; Bantry Workhouse and six neighbouring dispensaries, March 18; Bawnboy Union, March 17; Clones Union and three dispensaries, March 25; Coteraine Union, infirmary, fever hospital, and six dispensaries attached, March 22; Cork Workhouse and dispensary depôts, to be renewed on September 29; Cooteshill Union and several dispensaries, March 21; Downpatrick Workhouse and outlying stations, March 22; Dunmanway Union and three dispensaries, March 22; Grauard Fever Hospital and workhouse, contract to be renewed in September next; Kilkeel Union, March 17; Kilmallock Workhouse and six dispensaries, March 20; Londonderry Workhouse, fever hospital, infirmary, and seven outlying dispensaries, March 15; Manorhamilton Workhouse and four dispensaries, March 20; Midleton Union and several dispensaries, March 15; Monaghan Workhouse and five dispensaries attached, March 19; Strabane Infirmary, workhouse, and six dispensaries, March 18; Tulla Workhouse and three dispensaries, March 18; and by the governors of the Roscommon County Infirmary, March 19. Surgical and medical appliances are also required by the General Prisons Boards. In all of these the contractors will be required to observe certain regulations referring to conveyance, packing, cartage, empties, forms of tender, and the orthodox brace of surties.

#### SCOTLAND.

##### ABERDEEN.

THE PHILOSOPHY OF EXTENSION.—Since Mr. J. Murison has floated and successfully disposed of his two last ventures in Skene Street and Footdee he has been prospecting for another suitable district, and has now made arrangements for fitting up a shop near the south end of Bon Accord Street.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—The second musical evening of the session was held on Friday, March 7, in the North Silver Street Hall. Mr. Curtis, President, occupied the chair. There was a large attendance of members and friends. A lengthy and varied programme was submitted, consisting of piano and violin selections, banjo solos, songs, recitations, &c., preceded by an original prologue by Mr. McWilliam. The evening was an enjoyable one in every respect.

ALARMING EXPLOSION.—On Thursday, when Robert Calder, joiner, Kingsland Place, was engaged manufacturing gas for a lime-light entertainment, an explosion suddenly occurred, breaking the window glass and creating a scene of general disorder in the room. Strange to say, Calder escaped unhurt, but from the severity of the explosion and the loudness of the report a good deal of alarm was caused in the neighbourhood. It has since been ascertained that the explosion was owing to the fact that the chemist who filled the order supplied black antimony in place of black oxide of manganese.

ABERDEEN AND NORTH OF SCOTLAND SOCIETY OF CHEMISTS AND DRUGGISTS: ANNUAL MEETING.—The annual meeting was held on Monday, March 3, in the rooms of the society, 21 Bridge Street, Mr. John Johnston, the retiring president, occupying the chair. Now that monthly meetings are held the business was purely formal, and, after the reading of the minutes of the last annual meeting and the treasurer's report, a hearty vote of thanks was accorded to the retiring office-bearers. It was afterwards agreed that the whole of the retiring office-bearers be re-elected, and are as follows:—President, Mr. J. Johnston; Vice-President, Mr. J. P. Kay; Secretary, Mr. A. Strachan; Treasurer, Mr. J. Paterson; Librarian, Mr. J. Cruickshank; Curator, Mr. J. Clark; Auditor, Mr. W. Reid. Some of the office-bearers demurred to being re-elected, they holding the opinion that the honours should go round, but on account of the unanimous expression of the meeting they agreed to accept office for another year.

##### DUNDEE.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—At the meeting held on Thursday, March 6, Mr. William Mair read his prize essay on the progress of pharmacy, and Mr. James Petrie followed with his essay on the same subject. Mr. Moir also contributed a more practical note referring to recent improvements in pharmaceutical pro-

cesses, and the introduction of new remedies, and thereafter Mr. Petrie exhibited a sulphuretted hydrogen apparatus, which is used in the local university college. This is made on the same principle as Thompson's apparatus described in our issue of December 28.

#### EDINBURGH.

"HIGHLAND VIGOUR LINIMENT" is the latest notion that is being advertised by the gilded-car-and-four-horse-method. The gilded car and the name are all the information disclosed as yet. Further development is awaited.

SCOTLAND AND THE PHARMACEUTICAL SOCIETY.—A comparison of the recently issued calendar of the Pharmaceutical Society with the previous issue discloses the information that the Society has seven adherents less in Scotland.

SIR DYCE DUCKWORTH will be amongst those who will receive the honorary degree of LL.D. from the Edinburgh University next month. He took his M.D. here. At the same time Dr. J. H. Gilbert, of Rothamsted, Sir John B. Lawes' associate in his life-long labours in agricultural chemistry, will receive the same degree.

#### General and Provincial News.

TWO DRUG STORES in Broadway, New York, have recently changed hands for 250,000 dollars.

THE MORGAN CRUCIBLE COMPANY (LIMITED).—The 200,000/- 6 per cent. preference shares in this company, offered the public this week, were subscribed three times over.

THE NOTTINGHAM DENTIST, W. E. H. Arnemann, who shot Mr. Bristow, the judge of the Nottingham Court, last November, was sentenced at the Nottingham Assizes by Mr. Baron Pollock to penal servitude for twenty years.

A PHARMACIST'S MUNIFICENCE.—A large and magnificent building has been erected in Broad Street, Philadelphia, by Mr. W. R. Warner, of the firm of W. R. Warner & Co., wholesale pharmacists. The first floor, consisting of a spacious hall, has lately been opened to the public as a place of entertainment, and at the opening ceremony there was an influential assemblage to do honour to the generous giver.

A NOVELTY was shown at a recent conversazione of the Cambridge University Natural Science Club. This was a pedigree tree of the coal-tar products. With coal-tar for its trunk, the tree bore as its fruits bottles of gorgeous aniline dyes and crystalline products of extraordinary incongruity; saccharin, antipyrin, and smokeless gunpowder were amongst the things which crowned neighbouring branches.

DISCOVERY OF BRINE AT MIDDLEWICH.—It is reported that a large quantity of brine has been discovered at the shaft which has been recently sunk on Newton Farm, Middlewich. The brine, it is said, has risen in the shaft to a height of over 70 yards, the strength being 2 lbs. 10 ozs. of salt to the gallon. The total depth of the shaft is about 100 yards. The first bed of salt is 60 feet thick, and twelve yards below this a second bed has been discovered, yielding at a depth of 56 feet a very fine quality of amber rock-salt. The discovery has caused some excitement in the salt trade.

POISONED BY A LOTION.—About half-past three o'clock on Monday, March 3, Charles Hobson, aged 50 years, weaver, of Whitestones, Thurstonland, died at his home through drinking a lotion called "Cure All," which he obtained from a chemist, for lumbago. Apparently not noticing that the remedy was for outward application only, the unfortunate man took a dose of it about eight o'clock on the previous Saturday night. He immediately became unwell, suffering from a burning sensation in the throat, and subsequently Mr. Smailes, surgeon, of Honley, was called in, but his efforts were unavailing, and death ensued. The doctor said that the man had suffered from inflammation of the stomach, caused by taking the medicine.

W. B. FORDHAM & SONS (LIMITED).—The fourth annual meeting of Messrs. W. B. Fordham & Sons was held on

February 28. As we have already stated, a dividend has been declared of 10 per cent. Mr. W. B. Fordham (chairman), in moving the adoption of the report, referred to the success that had attended the sale of the "Moukey" brand soap. It had realised their most sanguine expectations. Aspinall's enamel appeared also to be more appreciated every day, and in the course of five and a half months the amount for purchases made reached the sum of 10,000*l.* sterling. The company's turnover for the year 1889 was 137,498*l.* 14*s.* 3*d.*, or nearly 11,000*l.* in excess of that of the previous year, whilst the percentage of working expenses was less, notwithstanding the increased volume of business. It was recommended that 500*l.* should be added to the remuneration of the directors, and this was referred to a meeting to be called immediately. The report was adopted unanimously.

A TRUSS CASE.—On Thursday, in the Westminster County Court, Mary Hammond, a domestic servant, employed at Holland Park, sued Mr. J. A. Sherman, 64 Chancery Lane, for 25*l.* damages for alleged negligence in treatment. In consequence of seeing an advertisement, the plaintiff said, she called on Sherman and consulted him. He said he could cure her, and she paid 1 guinea for an examination. Sherman, who is not a qualified doctor, took off a truss she was wearing and put on his appliance, telling her he would cure her for 20 guineas. She borrowed that amount from her mistress and gave it to defendant. The appliance, instead of curing her, as guaranteed, made her worse. Mr. Boodie, her solicitor, was consulted, and wrote demanding the return of the money and threatening an action if it was not paid, and a day or so after that a gentleman called upon her and handed her 21*l.*, she giving a receipt stating that she took the amount in settlement. The defence was that the receipt was a bar. Mr. Candy submitted there was no case to go to the jury, and his Honour concurred. Judgment for the defendant was entered with costs, not to be taken if no further proceedings are taken.

H. H. WARNER & CO. (LIMITED).—The statutory meeting of this company was held on Monday, under the chairmanship of Mr. T. W. Board, M.P. In the course of his remarks the chairman referred to the fact that the company had been described by some of the newspapers as a company for the sale of a quack mixture. He disagreed with that opinion. There was a great difference between a quack medicine and a patent medicine. The sale of the former was a fraud upon the public as it was of no medicinal value. A patent medicine, on the other hand, was of value, and therefore there was no fraud constituted by its sale; and, further, it merited and obtained the approval of the public. His reason for classifying Warner's remedies as "patent" was because he was satisfied with the immense number of voluntary testimonials which had been received by Mr. Warner as to their value. Applications for shares had been made to the extent of five times as many as they had for allotment. The applications which they had received from medical men, druggists, and patent-medicine dealers they had felt bound, for obvious reasons, to allot in full as far as possible. An interim dividend was then declared of 15 per cent. on the ordinary shares, and 8 per cent. on the preference shares, which it was stated would be paid within a week.

AN AMERICAN OPIUM SUIT.—In 1888 Messrs. McKesson & Robbins purchased of Messrs. De Valliere & Negroponte 50 cases of opium, for forward shipment. According to the terms of the contract the quality of this opium was to correspond with that of five cases previously purchased in New York from the same firm. In April, 1888, the tender of a first delivery on the 50 cases was made, but rejected by Messrs. McKesson & Robbins on the ground that the quality of the opium was not up to the sample, and, moreover, because the goods came from Paris and not from a usual port of shipment. They therefore claimed that the contract was void. Messrs. De Valliere & Negroponte thereupon sued to recover damages to the amount of \$4,000 for breach of contract. The case has been heard in the United States Circuit Court by Judge Wallace, the trial occupying two days. The plaintiffs held that as no port of shipment was specified in the contract, the defendants claim that shipment from Paris was not a regular shipment was invalid. Both sides submitted copies of analyses made by different chemists to show the quality of the opium, and a number of witnesses were examined to support the respective claims of the litigants.

In the result the jury brought in a verdict for the defendants, but the plaintiff's will ask for a new trial. This is the first time in the history of the house, extending over fifty-seven years, that Messrs. McKesson & Robbins have been involved in an important lawsuit, and they are, therefore, the more pleased with the verdict in this case.—*Oil, Paint, and Drug Reporter.*

CARBOLIC POISONING.—On Thursday of last week Esther Fell, 44, of 42 Joseph Street, Blackburn, was found by her father in an unconscious state in her bedroom. Lately she had been depressed in spirits on account of an increased deafness. When her father returned home from work on Thursday evening he found the door locked, and afterwards made the discovery that she had committed suicide. Doctors were at once sent for, and emetics administered, but the poor woman never regained consciousness. A cup which contained carbolic acid was found near, and it was evident, from the fact that she was burnt about the mouth and chin, that she had taken the contents. An inquest was held the following day, and a verdict of "suicide while temporarily insane" was returned.—An inquest was held at Liverpool, on Saturday last, on the body of John Woods, a blacksmith, fifty-two years of age, who resided at 49 Haliburton Street. For some years past the deceased had been greatly addicted to drink, and gradually gone off his food; and recently he had been very much depressed in spirits. On Thursday morning his wife left the house on some business, first proceeding to the place where her son was employed, and sent him home to keep his father company while she was away. The boy found his father lying on the sofa trying to vomit, and at once procured medical assistance. Dr. Campbell, who was called in, deposed that he found Woods suffering from carbolic-acid poisoning, which was, in his opinion, the cause of death. Mrs. Woods stated that her husband bought the acid for disinfecting purposes, and that it had been in the house for a long time. The jury returned an open verdict.

## Trade Notes.

MESSRS. WILLIAM EDWARDS & SON's new catalogue of British and foreign proprietary medicines, druggists' sundries, and miscellaneous articles has just been issued.

THE QUINADA WATER COMPANY have moved their factory back to their original premises (Messrs. Pollock & Co.), 133 Fenchurch Street, E.C., and will in future carry on their business from that address.

MESSRS. TRON & PISTORESI, of Leghorn (Italy), announce that Mr. Ezio Pistoresi has ceased to be a member of the firm. The business will be continued by the remaining partner under the style of Enrico Tron & Co.

MESSRS. A. & M. ZIMMERMAN send us a copy of letters which have passed between them and Professor Charteris, of Glasgow, in regard to synthetically prepared salicylic acid which Scherings, of Berlin, now produce. Professor Charteris states that this acid is in "white acicular prisms," and he has satisfied himself that its "physiological action is similar to that of the acid obtained from natural salicylates, and therefore of such purity as to be equally eligible for medical use."

"SULFONAL CAPSULES (LUNAN).”—One of the chief objections to the use of sulphonal as a hypnotic is its comparatively slow solubility, whereby its action as a hypnotic is so long delayed that it is necessary to take the dose a few hours before sleep is desired. Messrs. James Robertson & Co., of Edinburgh, have addressed themselves to remedying this defect, and their Mr. George Lunan has elaborated a process whereby, it is claimed, the sulphonal is obtained in a state of solution with a comparatively small proportion undissolved. The solution, or paste, is put up in 5, 7*g.*, and 10 grain capsules. These doses are smaller than usual, but it is claimed that the sulphonal in this form is much more active, and begins to exert its physiological influences in half an hour. These are advantages which, it is obvious, extend the usefulness of the drug, and it would be of interest on that account to introduce the capsules to medical men for trial.

## Pharmaceutical Society of Great Britain

### EVENING MEETING.

MR. JOHN ROBBINS, the treasurer of the Society, presided at the meeting held on Wednesday evening. There was a better attendance than usual, and the bill of fare was more varied. The curator was first called upon to describe

#### THE SPECIMENS ON THE TABLE.

A sample of white Mogadore gum was first referred to. This is in opaque tears, which differ in appearance from the transparent tears seen lately. It makes an excellent mucilage with twice its weight of water. It cannot be distinguished from genuine Kordofan gum, and Mr. Holmes agreed with the suggestion of a member of our staff, that it is really Kordofan gum which finds its way to the market by a new route. A sample of cinnamon-leaf oil was sent from the Seychelles by Mr. J. J. Sharp, the distiller. The cinnamon plant yields three distinct essential oils—the leaves one containing eugenol, the bark one in which cinnamic aldehyde is the chief component, and the root one containing camphor. A couple of pieces of Canadian asbestos rock were shown, also a sample of opium adulterated with lead. Regarding this, Mr. Powell, the donor, explained that the adulteration was detected in his pharmacy in the course of making laudanum. The lead appeared to be in raspings, and was placed immediately under the leaf envelope. Half an ounce to the pound was about the proportion present. The wholesale supplier stated that the adulteration with lead had disappeared for a long time, but had lately been renewed.

#### OIL OF BETEL-LEAF

was the next subject, and was introduced in a paper by Mr. D. S. Kemp, late of Bomhay. Mr. Kemp explained the use of betel-leaf as a masticatory along with areca-nut, gambier, and lime, and in a few interesting sentences described the universal custom in India of using this combination as a means of warding off fatigue as well as in social functions. In 1835 he had submitted about a hundredweight of the fresh leaf to distillation, and obtained 3 oz. of volatile oil. He noticed that as the distillate came over there was a light oil which floated on the surface of the water, and also one which sank. The latter had a sp. gr. of 1.039. Since then Mr. Prebble, of Kemp & Co. (Limited), Bombay, had distilled some fresh leaves. In the winter months 90 lbs. of fresh leaves gave him 1½ oz. of a pale green oil, which had a sp. gr. of 0.904. No heavy oil was obtained on this occasion, whereas on another occasion, in the summer months, the heavy oil was again obtained. These results throw some light upon the contradictory results obtained by Eykman and by Bertram and Gildemeister. The former began to work on this oil in 1835, the leaves used being from plants grown in Buitenzorg (Java). The oil obtained had a sp. gr. of 0.959, possessed the odour of the leaves, and became brown on exposure to the air. He found it to consist of three constituents, citrene-terpene, a sesqui-terpene, and para-allylphenol, or chavicol, the last-named being the active constituent. Bertram and Gildemeister distilled their oil from dried leaves. It had a sp. gr. of 1.024, and they allege that its active constituent is betel-phenol, a substance isomeric with phenol (THE CHEMIST AND DRUGGIST, February 1, page 154). Previously they had said that this was really eugenol, and they also put down sesqui-terpene and cubebin as amongst the constituents. Eykman has since gone over his work again, and persists in the identity of chavicol, also that the lighter portions of the oil are cymol, cineol, and, amongst other things, menthol. He thinks that the other authorities have been working with an oil entirely different from his, probably it was not betel-oil at all. Mr. Kemp's results throw some light upon that. Apparently, the leaves do not always yield the same product. It was pointed out that chavicol is an active antiseptic, five times stronger than carbolic acid.

In the discussion which followed Mr. UMNEY referred to the interesting character of the paper, especially in regard to the variation in the product at different seasons. It was not usual, he said, to find a drug yielding a light oil at one

season and a heavy one at another. Mr. MACEWAN said he had placed a sample of betel-leaf oil upon the table, which he had obtained from Samarang (Java) in 1887. He referred to the causes which led to the introduction of the oil (see THE CHEMIST AND DRUGGIST, xxxi., page 807), and said that his specimen had a sp. gr. of 0.943. It was remarkable for the fact that it possessed an odour somewhat like ethyl ether, and Mr. Kemp had suggested that this might be due to its having been removed from the distillate water with ether. There might be another explanation. One of the constituents of the oil, according to Eykman, was citrene-terpene, and the decomposition of that might give rise to an odour analogous to that evolved from decomposing lemons. Mr. JOHN MOSS said that betel oil was a market article, although it was little asked for, and he was glad that it was attracting attention. He suggested that the leaves should be examined for an alkaloid, seeing that they possessed virtues similar to tea and coca. He was not surprised at the different results which had been obtained on distilling the leaves at different seasons. They well knew that the same plant grown in different parts of the world gave very different yields of product. Professor ATTFIELD was much interested in the paper, which, in his opinion, was a valuable one. It was a strong illustration of the statement which he had frequently made, that it was useless to try to find physical and chemical constants in essential oils. They were mixtures which varied according to circumstances, and it was almost impossible to reproduce these circumstances at distinct operations. Mr. HOLMES commented on the virtues of chavicol as an antiseptic, and pointed out that the leaves of allied plants, such as cubeb, do not contain an alkaloid.

Mr. KEMP then replied, and received the thanks of the meeting.

#### RESIN SOAP AS AN EMULSIFYING AGENT.

This was the title of the next paper, contributed by Mr. H. Collier, of Guy's Hospital, which was a thoroughly practical one. The soap is made by boiling 180 grains of common yellow resin and 300 grains of caustic soda in a pint of water for two hours, at the end of which time it is reduced to a yellow pasty mass, which is to be heated to dryness and powdered. The product resembles powdered resin very closely, but dissolves readily in water with the aid of a little heat. The solution is saponaceous, but never gelatinises. The soap dissolves freely in rectified spirit also. If mercury is shaken with the aqueous solution (20 grains to 1 oz.) the metal is broken up into minute globules, which do not run together again, as each globule is coated with the soap. Chloroform is transformed into a creamy liquid. In both cases the soap acts much better than tincture of quillaia; it gives more viscosity than the latter. Working on the B.P.C. formulary lines, an excellent *liquor carbonis* is obtained by dissolving 2 oz. of the soap in a pint of S.V.R. by heat, adding 4 oz. of purified coal-tar, heating to 120° F., setting aside for two days, and decanting or filtering. Mr. Collier showed how perfectly this mixes with water; also how *pix liquida*, Peru balsam, and oil of cade are similarly emulsified. The soap gives splendid results with cod-liver, almond, olive, and castor oils. The plan is to dissolve 10 grains of the soap in 1 oz. of water, and shake up with 1 oz of the oil. Castor oil is less easily emulsified than the others, but they do perfectly with 5 grains of the soap. Essential oils are also very readily emulsified. There is an opening in this direction for making inhalation emulsions, the soap taking the place of the magnesia of the T.H.P. formulæ. Thus 10 grains of the soap, 3ij. of the volatile oil, and water to 5ij., make an emulsion which mixes very well with water. Creosote requires 20 grains of the soap. Five grains added to a drachm of spirit of camphor makes a preparation which mixes perfectly with water—the camphor not separating. So also 20 grains with 1 oz. of tincture of tolu. Thymol gr. xvij., resin soap gr. xx, spirit 5ij., is a good formula for a preparation which may be diluted, and for such oils as santal and copaiba we get good emulsions with a drachm of the oil, 10 grains of the soap, and 2 oz. of water.

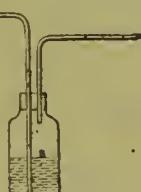
Mr. KEMP said that Jeyes' creolin contains resin soap, but Hartmann's does not. The former makes the better emulsion. Mr. GERRARD corroborated this statement. He said

he had lately found that Jeyes' preparation owes its miscibility with water to the resin soap which it contains. This soap, he thought, is a most remarkable emulsifying agent. It gave excellent results with carbolic acid, and, from observations, he was inclined to believe that Jeyes' creolin is prepared from mixtures, probably the by-products obtained in making carbolic acid, for ordinary coal-tar gives much darker solutions. The soap seemed to have its most useful application in the emulsification of essential oils for inhalations, and he could corroborate all that Mr. Collier had said.

Mr. LLOYD WILLIAMS asked if the soap contains free alkali, and, if so, is this not objectionable in the case of essential oils? Mr. HELBING said that some attention had been paid to resin soap on the Continent a few years ago. It was made from resin and sodium carbonate, and was recommended for blennorrhœa in 7, 15, and 30 grain doses. Since then attention had again been called to it, owing to the fact that it was alleged to be a constituent of Jeyes' creolin. Many people had attempted to analyse that preparation; and he was able to say, in reply to Mr. Gerrard, that the characteristic which he had mentioned was a proof that it was prepared from the higher homologues of phenols, which were most easily emulsified and were non-poisonous. Professor ATTFIELD asked if ordinary yellow soap, which contains resin soap, had been tried; also other soaps. The CHAIRMAN objected to the taste, and mentioned that tincture of myrrh is an excellent thing for emulsifying camphor. Mr. COLLIER, in his reply, stated that the soap contains only 0.02 per cent. of free alkali. He thought Mr. Helbing's remarks were very valuable, as proving the innocuous nature of the soap; it is in this respect also superior to quillaia, for that is a heart poison. The taste of the soap is easily covered—in the B.P.C. cod-liver oil emulsion it is not noticeable. Common soap has the objection that its solutions quickly gelatinise.

#### DR. J. C. THRESH

then gave a demonstration and brief explanation of his method for the estimation of ethyl nitrite in spirit of nitrous ether. Dr. Thresh said that he had for long been impressed with the idea that the methods now in use were not simple enough for retail chemists and students, and the one which he now introduced required neither special apparatus nor special reagents. A wide-mouthed 1-lb. bottle is taken, and fitted with a double perforated indiarubber stopper. It is three-fourths filled with water, 2 grammes of potassium iodide, and 10 c.c. dilute sulphuric acid with a little starch mucilage put into it. Then the stopper is put in, with the left-hand tube dipping a few inches below the surface of the water, and the other as in the sketch. To get rid of the oxygen in the water and in the air-space the left-



hand tube is attached by means of a piece of rubber tubing to a coal-gas tap, and the gas passed through for ten minutes. It may be ignited as it comes away from the bottle. By this time the oxygen is driven out of the bottle, and now 5 c.c. of the spirit of nitrous ether is taken up with a long pipette, the right-hand tube removed, and the pipette introduced as quickly as possible. If it be allowed to rest on the bottom of the bottle and the gas turned on, it soon flows out. Iodine is at once set free. A small tube attached to the outlet of a burette is now put in the place of the pipette, and hyposulphite solution is run in until the blue colour disappears. For the minimum Pharmacopeial strength there is still enough reagents in the bottle for a second estimation. Each c.c. of the B.P. hyposulphite solution is equal to 0.0075 gramme ethyl nitrite, so that  $0.0075 \times$  number of c.c. hyposulphite used  $\times 20$  = per cent. of ethyl nitrite, and 0.4 per cent. is equal to one volume of nitrous oxide gas. Dr. Thresh showed that the process gives results nearer the truth than Allen's. The following is the average of six tests:—

Theory	Thresh	Allen
2.265 per cent.	2.21 per cent.	2.12 per cent.

The amount of oxygen in coal-gas is so trifling that it does not vitiate the results.

Mr. UMNEY opened the discussion by congratulating the author on the simplicity of his method, and said that, although Allen's method was in daily use in his laboratory,

he would in future employ this one. Professor ATTFIELD was also charmed with the process, briefly referred to other methods, and, as reporter to the British Pharmacopœia, felt rejoiced that pharmacists had now several good methods of assay to choose from, whereas a few years ago there was none. Mr. FUGE, his assistant, said he had tried the process, and thoroughly confirmed Dr. Thresh's statement that the results were accurate and easily obtained. The difference between individual estimations was not more than 0.01 to 0.02. Mr. SIMONS, a student of Professor Attfield's, also confirmed. Dunstan and Dymond's process was not so simple: the flask sometimes burst, one could not always get the whole of the spirit of nitre into the flask, and some of the hyposulphite solution could not be returned. Mr. LLOYD WILLIAMS said that, while closer results could be obtained by Dunstan and Dymond's process, there was the glorious uncertainty about the flask, and Dr. Thresh's method was simpler. Dr. THRESH briefly replied.

#### MORE ABOUT SWEET NITRE

was contributed by Mr. T. S. Dymond, in "A Review of Recent Work on Spirit of Nitrous Ether." This proved to be a criticism of Dr. Squibb's paper on the subject, which was fully referred to in our issue of August 31, 1889. Mr. Dymond first spoke of Dr. Squibb's conclusions regarding the relative merits of the B.P., U.S.P., and his own methods of preparing the spirit, and gave it as his opinion that the results were valueless, because the relative proportions of the ingredients are not the same. The next point had reference to the nature of the gas which is evolved when the spirit is mixed with water. This gas, Mr. Dymond says, is ethyl nitrite and air. At this point he began to criticise Dr. Thresh's paper. He claimed that the new process was substantially the one which Professor Dunstan and he had devised, and disagreed with Dr. Thresh's statement that that process is not suitable for pharmacists and students. It was as simple as Dr. Thresh's, he said, and more accurate, for coal-gas did contain oxygen, and by passing some gas into a flask containing nitrous oxide and hydriodic acid, he showed that iodine is liberated. Dr. Thresh remarked here that the amount was perfectly trivial, as Mr. Dymond would find if he estimated it. This Mr. Dymond admitted, and proceeded to criticise Dr. Squibb's method for taking the specific gravity of ethyl nitrite. His remarks on the difference between the therapeutic properties of solution of ethyl nitrite and spirit of nitrous ether were also touched upon, and the paper was concluded by an able defence of the solution, and a strong appeal to pharmacists to push it, and to the Pharmacopœia authorities to introduce it as an alternative official preparation.

Professor ATTFIELD, on behalf of Dr. Thresh, who had been compelled to leave, said that he did not pretend that his process was quite as correct as Dunstan and Dymond's, but the difference was so extremely slight as to be of no practical importance to pharmacists who were called upon to supply spirit within certain wide limits officially allowed. At any rate the figures in his case were within 2 in 100 of absolute accuracy, and those in Dunstan and Dymond's method were within 1 in 100. Professor DUNSTAN said that the two processes had been brought into contrast, but that had never been his intention in making his process public two years ago. It was intended to be employed in the investigation of a series of alcoholic nitrites. Personally, he thought that Dr. Thresh's process was convenient and most ingenious. He proceeded to speak of the necessity of pharmacists doing something to introduce to the notice of medical men the solution of pure ethyl nitrite. It was most important that medicinal bodies of known composition should be used, and, although the General Medical Council was a conservative body, he hoped, for the advantage of therapeutics, that the solution would be taken up. Professor ATTFIELD said, in regard to this, that there was now a reasonable proposal before them—namely, that solution of ethyl nitrite should be introduced into the Pharmacopœia as an alternative preparation. There was a good deal to be said in favour of the proposal, but he would point out that Professor Leech had found no important physiological or therapeutical difference between the old spirit and the new solution. (Professor Dunstan here remarked, "Therapeutic only.") Professor ATTFIELD said many medical practitioners deduced from that statement that

the old spirit was good enough for them, so it was undesirable to rush the new solution. Still he hoped the manufacturers would take it up as a well-known firm in the Midlands had done, and that pharmacists would bring it before medical men, and report the results to the journals of pharmacy. Mr. C. B. ALLEN had something to say in response to this. He had introduced the solution to one or two medical men, who had given it considerable trial, and their report was very unfavourable. They said that the solution was in no sense as good as spirit of nitre, and dropped its use entirely. The spirit of nitre contained a something which made it better than a solution of pure ethyl nitrite. Mr. UMNEY said this was the whole question, and he hoped such trials would be made as would definitely settle the matter. He could assure Mr. Dymond that he was not alarmed when they started to make 100 lbs. of the spirit in his laboratory, and if proper precautions were taken, and a certain amount of "nous" used, there was no difficulty whatever in controlling the reaction so that the distillate came away regularly, and with a little spirit in the receiver they obtained a product which generally contained 31 per cent. of nitrous ether. A gentleman in the audience spoke about the good qualities of the spirit of nitre, and said that some old practitioners that he knew persisted in maintaining the value of the spirit, which he thought must be due, to some extent, to the amount of alcohol in it, especially when it was taken by total abstainers, a remark which produced a roar of laughter. The CHAIRMAN also said that they could not get rid of the fact that some old people had a very large amount of faith in the old spirit. Mr. DYMOND then replied to Dr. Thresh's remarks, and again referred to the therapeutic effects of the solution of ethyl nitrite being definite. He said that it had now been about two years before the trade, and deserved to be taken up more generally. Mr. MacEwan asked if he could give a rational method for dispensing this solution, and to this he replied that it could be done in the same way as spirit of nitre, for the amount of alcohol in the solution would tend to delay the decomposition somewhat. Mr. MacEwan suggested that the decomposition would go on nevertheless, and asked if there was not some better way by which the definite nature of the solution could be retained. Mr. Dymond replied that it could be dispensed in small bottles and be ordered to be given in drops. This concluded the proceedings.

## Pharmaceutical Society of Ireland.

THE monthly meeting of the Council was held on the 5th instant, the President, Mr. Charles Evans, in the chair. Also present: the Vice-President, Mr. Wells; Professor Tichborne, Dr. Burnes, and Messrs. Beggs, Merrin, McCormack, Hayes, Hodgson (Treasurer), and Simpson.

### PROSPECTS OF LEGISLATION.

The Registrar (Mr. Ferrall) read the following letter from the Attorney-General for Ireland, Mr. Madden, M.P.:—

February 10, 1890.

Sir.—Your letter of the 6th was forwarded to me here. Having left Dublin, I regret that it will not be in my power to receive a deputation from your Society. Should a Bill dealing with the subject to which you refer be introduced during the present session by any member, I shall be glad of any information which your Society may consider of importance.

Faithfully yours,  
A. T. Ferrall, Esq.

D. H. MADDEN.

PRESIDENT: That does not look like as if it were his intention to introduce a Bill at present.

Mr. HODGSON: I suppose it is known that the Belfast gentlemen are taking active steps in reference to a Bill?

VICE-PRESIDENT: They are making incorrect statements to the Attorney-General. One of them is that Mr. Hodgson resigned his connection with this Society. Another assertion in the memorial which the chemists and druggists have sent to the Attorney-General is that we are becoming bankrupt, and must soon collapse unless we get help from some source.

Professor TICHBORNE read from THE CHEMIST AND

DRUGGIST the statement contained in the memorial alluded to, which was as follows:—"At the last moment a section of the Council of the Pharmaceutical Society repudiated the compromise come to, and intimated its intention of opposing the Bill, the result being that the President, Vice-President, Honorary Treasurer and most influential members of the Council resigned."

Mr. HAYES: Well, that's the truth. I think Mr. Hodgson did resign.

Mr. HODGSON: Oh, yes.

Mr. HAYES: But he was asked to reconsider his resignation, and did so.

PRESIDENT: The statement does not convey that impression.

VICE-PRESIDENT: The idea conveyed is, that he went away from the Council.

Professor TICHBORNE: There had been some resignations previously, in consequence of offence taken at some observations made here.

VICE-PRESIDENT: Mr. Hodgson resigned, but afterwards withdrew his resignation. Mr. Allen resigned, but his resignation had nothing to do with the Bill. He had been ordered by his doctors to do so on account of his health.

Mr. HODGSON: Since that little difficulty there has been a re-election of your officers, and I was one of those who were re-elected.

Professor TICHBORNE: I suppose our financial position is very good?

Mr. HODGSON: It is improved.

Professor TICHBORNE: Our income has increased, in spite of the striking off of names.

Mr. HODGSON: These gentlemen, headed by Sir James Haslett, had a meeting in Dublin last week.

VICE-PRESIDENT: And the same journal said of them that they made a great deal of talk and had a great many reunions and dinner parties, but that there was very little to show for it.

Mr. HAYES: Supposing that the chemists and druggists do not bring in any Bill, but continue selling poisons, and in many cases compounding, are we to allow that?

VICE-PRESIDENT: I agree with a great deal of what is being said in the north of Ireland. I believe that we have not been carrying out the Act of Parliament that we have got, and that by carrying it out we could stop these things.

Mr. SIMPSON: Where are we to get the funds to do so?

VICE-PRESIDENT: Where did we get the 150/- to spend last year on a Bill that was not worth anything to us? If you prosecute in a few good cases, you will soon stop the others.

Professor TICHBORNE said his reading of the Attorney-General's letter was, that he did not want to be bothered about the subject at present.

Mr. HODGSON: I think it a courteous letter, and that we ought to acknowledge it, and say that we are not at present propounding any Bill, but that there are defects in our existing Act which we are very desirous to have remedied. That will show that we are not connected with those gentlemen who are urging their point with the Government, and doing it continuously.

Professor TICHBORNE: I think we ought to discuss this matter in committee. We have done so heretofore.

Mr. BEGGS: I second that proposal.

Mr. HODGSON: Why not let them know what our views are? We have no secrets.

Professor TICHBORNE: My view is, that we should be prepared with a Bill, showing how far we are prepared to go, even though we should not place it before the Attorney-General.

Mr. HODGSON: You have already acceded to a Bill.

Professor TICHBORNE: No, this Council has not.

Mr. HAYES: We promoted a Bill, and gave way on a great many points.

Professor TICHBORNE: That very Bill was one of the causes of quarrel. The late president resigned on a point in it that you would not accept. That Bill had become quite a travesty of the original Bill promoted by the Council.

Mr. HAYES: There were only one or two clauses that we differed on.

VICE-PRESIDENT: I do not think that if it had gone back to the House of Lords they would have recognised it as the same Bill at all.

Mr. HAYES: I do not think there is any necessity for going into this now.

Mr. HODGSON: The Government have no intention of promoting a Bill now; and I maintain that no Bill propounded by the chemists and druggists will be considered by the Government unless it is endorsed by the Pharmaceutical Society. We are a recognised body, who have been working under an Act of Parliament for years; and I do not think that any alterations proposed to be made in it by any outside body would be accepted without consulting us.

Mr. MCCORMACK: What the Attorney General wants to know is—whether, in the event of anyone bringing in a Bill, we will give him every information in our power.

It was then ordered that the Registrar should write to the Attorney-General expressing the thanks of the Council for his letter, and stating that they are not taking any steps to promote a Bill at present, but that should they do so they would certainly lay their views before him for his advice and counsel.

#### IS THE SCHOOL ILLEGAL?

A letter was read from Mr. William N. Allen, M.P.S.I., enclosing a copy of a letter which he had forwarded to Sir William Kaye, Q.C., Clerk to the Privy Council of Ireland, pointing out that the establishment by the society of a school of chemistry was at present illegal, because the sanction of the Privy Council to the resolution in favour of it had not been obtained.

The VICE-PRESIDENT observed that Mr. Allen stated in his letter that he had communicated with the Registrar on this matter. The Registrar said Mr. Allen made the statement quoted verbally when he called to pay his subscription; and that he (the Registrar) reported this to the Vice-President (the President being absent at the time), but without mentioning Mr. Allen's name. Professor Tichborne and Mr. Hodgson expressed the opinion that this mention of the subject to the Registrar could not be regarded as a communication to the Council, and the Vice-President thought they should also tell Mr. Allen that they thought an old member of the Council should have treated them with more courtesy.

#### PUBLIC APPOINTMENTS.

A letter was read from Mr. T. R. Connolly, Dundalk, stating that on the preceding Monday an election was held for the office of apothecary in the Louth Infirmary. The writer and two other licentiates of the Society presented themselves as candidates, but were declared ineligible; and a licentiate of the Apothecaries' Hall was elected. He asked that the Pharmacy Act should be amended so as to render licentiates of the Society eligible for such positions. Four years ago he brought a similar case under the notice of the Council, and the then President, Mr. Brunner, endeavoured to have the matter set right, but failed. In reply to the Vice-President, the REGISTRAR said the writer claimed eligibility under clause 34, which says that licentiates of the Society are eligible to be appointed apothecaries to district lunatic asylums, public gaols, and prisons, in Ireland, but that they are not to prescribe.

Professor TICHBORNE: Sometimes in hospitals the resident apothecary is supposed to act as a medical man.

Mr. HODGSON: Wherever an apothecary is allowed to hold a situation in a public institution, we ought to make a fight that our licentiates shall be placed on an equal footing. It is our duty to our licentiates to do so.

It was ordered that inquiry should be made into the case, and in particular as to the duties of the apothecary to the infirmary.

#### THE PRELIMINARY EXAMINATION.

A letter was read from the General Medical Council requesting information respecting the Preliminary examinations which had been held by the Society during the past year.

The PRESIDENT: The highest percentage obtained by any candidate was 72, and the lowest of those who passed 44; thirty-one candidates passed and twenty-eight were rejected. The calendar containing the examination-papers will be forwarded.

An order was made that the information required by the General Medical Council should be forwarded in detail.

#### MISCELLANEOUS.

Mr. Eugene MacSweeny wrote requesting the Council to accept from him a certificate of having attended the prescribed course of practical chemistry at the City School of Chemistry and Pharmacy, London. It was ordered that inquiries should be made in reference to the application. A report from the Law Committee was adopted. Mr. James Hartford, of 3 Cedar Street, New York, was elected a member of the Society, and some payments were ordered.

#### THE LONDON CHAMBER OF COMMERCE.

##### ANNUAL MEETING OF THE CHEMICAL TRADES SECTION.

THE annual meeting of this section was held at Botolph House, E.C., on Wednesday, March 12, Mr. Thomas Tyrer (President) in the chair. The following members were present:—Messrs. A. B. Hill, Thomas Christy, John Moss, J. Elbrough, Shaw, C. F. Macadam, David Howard, George Bull Francis, Bovertown Redwood, Bertram Blount, E. J. Jones, O. Murray, C. Umney, and W. H. Francis.

The Secretary having read the minutes of the last meeting, and the election of the committee and officers for the year 1890-1, and other matters of business having been gone through, the chairman called upon Mr. Chas. Umney to make a statement in reference to the proposed

#### REVISION OF RAILWAY RATES.

Mr. UMNEY narrated concisely the work done by the sub-committee appointed to watch the interest of the drug and chemical trade, and also referred to the examination of Mr. David Howard before the commission. Mr. Howard's evidence was reported at length in *THE CHEMIST AND DRUGGIST* of February 23. In the course of his remarks he stated that after the objections of the section were lodged, in the autumn of last year, two slight modifications in the proposed classification were made by the railway companies, viz., lime-juice in casks was put from class 3, in which it had been placed, to class 2, and liquid ammonia was also more favourably classified, viz., from class 5 to class 4. These trivial alterations were not encouraging, and a conference took place in December between the railway managers and a deputation of this section of the London Chamber (Messrs. David Howard, J. Evans (Liverpool), F. H. Lescher, W. H. Francis, and Chas. Umney), when the classification of "small" and empties was fully discussed. The ease for the drug and chemical trade was ably stated by Mr. Howard, and, as far as one could judge, favourably received by the railway managers. Upon the question of "small" they were most anxious to know what would satisfy the trade. Mr. Umney suggested that they could not do better than adhere to the system now in use, and which had, in his opinion, worked excellently for the last twenty years, viz., to charge a small and increasing percentage as the weight of the package became less, this percentage to be increased on freights of low value, and decreased on those of higher value. Taking as a standard a freight of 40s. per ton, and the highest weight of package to be classified as a "small" at 500 lbs., the sliding scale should be as follows:—On 4 cwt., an advance of 6 per cent.; on 3 cwt., of 8 per cent.; on 2 cwt., of 12 per cent.; on 1 cwt., of 25 per cent.; and on  $\frac{1}{2}$  cwt., of 50 per cent.—these percentages being in strict accord with the present Railway Clearing-house book.

Shortly after this meeting the companies changed their front, and in December last issued a proposition in reference to "small," adopting the following graduated scale of charges:—A parcel not exceeding 28 lbs. to be charged as 1 cwt., from 28 to 55 lbs. as  $1\frac{1}{2}$ , from 56 lbs. to 1 cwt. as 2 cwt., from 1 to 2 cwt. as 3 cwt., from 2 to 3 cwt. as 4 cwt., from 3 to 4 cwt. as  $4\frac{1}{2}$  cwt., and above 4 cwt. as 5 cwt. This, of course, was a small concession, because in their original scheme it was proposed that all smalls under 560 lbs. should be charged in the highest class, and double extra tonnage rates; but the companies' proposal to treat all freights, whether 10s. a ton or 50s. a ton, to an equal percentage of advance was obviously unfair.

While it must be acknowledged that this new scheme would give some relief in comparison to the original to

traders whose consignments averaged from 3 to 5 cwt., still it would press us hardly, or even more heavily, upon druggists, 80 per cent. at least of whose consignments were under 2 cwt.

The committee therefore determined to oppose this new departure, not only because it represented an enormous advance in the charges, but because, in their opinion, if the sliding-scale charge which is now in use, and to which allusion had been made, is not to be adopted, then the weight of "smalls" must not be more than half the weight proposed by the railway companies—say, 2½ cwt. instead of 5 cwt., or, perhaps, better still (in order to make our "small" weights in accord with those adopted years since by Scotch railways), 2 cwt.

Mr. Umney then distributed to the meeting an elaborate chart, prepared by himself and his fellow-members, of the Railway Rates Committee. The chart contained in a tabulated form a table, calculated from the Railway Clearing-house book, showing the percentage rate charged on "smalls" above the ordinary tonnage rate under the old system, the continuance of which the committee declares to be preferable to the adoption of the companies' December proposition alluded to above. The table shows that the charge for "small" varies, according to the weekly consignment and the tonnage rate, from 105*l.* to 265*l.*, against 100*l.* of ordinary freight. Then follows the December proposal of the companies, of which the salient features have been already given, and finally a long table of examples showing the difference in the present and the proposed charges. According to this table, where the present charges for "small" weighing 1 qr. is from 6*d.* to 1*s.* 3*d.*, according to tonnage rates, under the new proposition the maximum rates might range from 9*d.* to 2*s.* 6*d.* For consignments up to 1 qr. 14 lbs. the respective figures are 7*d.* to 1*s.* 6*d.*, against 9*d.* to 3*s.* 9*d.*; for 3 qrs., 9*d.* to 2*s.* 4*d.*, against 1*s.* to 5*s.*, and so on, though the difference on a consignment weighing 4 cwt. 1 qr. 22 lbs. would only be very slight, the charge now in force being from 2*s.* 3*d.* to 11*s.* 2*d.*, and that proposed from 2*s.* 6*d.* to 12*s.* 6*d.* The illustrative chart was well calculated to impress upon its recipients the sweeping character of the companies' latest proposals. In conclusion the speaker observed that he could say much more on this matter of "small" were he not of opinion that it is not only unnecessary, but that the companies will again retreat from the amended position they took up in December, for Sir Henry James recently intimated to the tribunal that the matter of "small" would be again considered by the English companies.

Mr. Umney finally added that he might also have spoken at length upon the question of "empties," but an hour's talk would not be half as convincing as a five-minutes' perusal of an excellent table published by the wholesale chemical dealers, who are approaching the matter through the Lancashire and Cheshire committee. Copies of that table were also handed round to the meeting.

#### FUTURE WORK FOR THE SECTION.

Mr. THOMAS TYRER proposed a vote of thanks to Messrs. Howard, Umney, and Francis for their efforts in connection with the railway rates revision, in the course of which he observed that the main work of the year had been the railway rates question. During the year the executive had met twenty times, and the Chemical Committee fourteen times. During the past year the committee had given its approval to the proceedings of the council in its efforts to be a medium of conciliation between employers and their workmen. Conciliation, rather than any other kind of action, was the way of preventing a disastrous waste of energy and temper. It was gratifying to the Chamber that the labours of the committee especially appointed for the purpose had met with good results. During the year, also, they had dealt with matters relating to fraudulent bills of lading and the insurance on petroleum, but perhaps the question they would have to take most interest in in the immediate future was with regard to the working of the Merchandise Marks Act. He believed Mr. Howard held the opinion that it was an advantageous Act for the chemical trade; but, with regard to that special section, he thought that recent experiences would not tend to confirm that opinion. If the statements of merchants were correct, there was a considerable amount of hardship under the Act. When they saw the enormous

strides of the chemical industry in Germany, and looked at the statistics showing the amount of the imports into our own colonies of products which used to be made in this country, or at any rate were sent from this country, and now came direct from abroad, they could only come to one conclusion. Until recently it was a fact that freights were actually cheaper from some of the German ports than they were from London. They would have to consider whether before the proposed inquiry by a select committee, of which Mr. Howard Vincent had given notice to the House of Commons, they should not be represented. It was said that the colonies must adopt a similar form of protection to that they had; but it was impossible to compel the colonies to adopt the same policy in this matter as the mother country. Whilst on the subject, he would refer to a leading article which appeared in the *Chamber of Commerce Journal* of March 5, in which the whole argument turned upon the question of the injury to the trader or merchant as such, and a statement was made that 50 per cent. of the general trade transacted by merchants in this country was in foreign goods, and that that 50 per cent. was even under the mark rather than over it. The article went on to say that that large volume of trade deserved support, and it was the duty of the legislature to encourage and retain it. They were face to face with an interesting and important a problem in trade relations as could possibly be put before any trade association, or before Parliament itself. He thought they should make it a subject of serious consideration, with as full examination of the facts as could be ascertained.

Mr. DAVID HOWARD, in reference to the article mentioned, said that the Chamber as a body was not responsible for it, and he deeply deplored and regretted its publication without the council's leave. He also repudiated all responsibility for its tenure.

Mr. TYRER, referring to the patent laws, said that was also a subject which required their consideration. He reminded them that it was possible for inventions and discoveries by foreigners to be patented in this country simply for the purpose of preventing the articles patented from ever being made in this country.

Mr. HOWARD then proposed, and Mr. UMNEY seconded, a motion that Mr. Tyer be re-elected President for the ensuing year. This having been unanimously agreed to,

Mr. TYRER proposed, and Mr. THOMAS CHRISTY seconded, that Mr. Wightman be elected to take the vice-chair in place of Mr. Blagden, retired. This was also agreed to, and the proceedings terminated in the usual manner.

#### MARRIAGE.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

KEMP—COUTTS.—At Rosehill Villa, Hilton, Woodside, on March 7, by the Rev. J. Duncan, C.C., James Kemp, chemist and druggist (house steward Royal Asylum), Aberdeen, to Agnes Coutts.

#### DEATHS.

BROOKE.—On March 11, at 5 Walcot Street, Bath, Mr. C. Brooke, chemist and druggist.

BURDEN.—On March 11, at 37 Duke Street, Grosvenor Square, after a painful illness, Elizabeth, wife of Edward M. Burden, pharmaceutical chemist.

COUTTS.—On February 26, at Pathhead, Kirkcaldy, Mr. Alex. Coutts, chemist and druggist. Aged 53. Mr. Coutts carried on his business in Mid Street, Pathhead, and was much respected and esteemed by his fellow-townsmen for his kindly manner and the interest he took in local progressive questions. He was associated as correspondent with the local press, and general regret is felt at his sudden death, which was occasioned by paralysis. He has a son in the business.

ISALSEON is the name of a new oil produced in America by the distillation of oleic acid with quicklime. It is colourless, odourless, and does not become rancid.

## Legal Reports.

## THE UNQUALIFIED SELLER.

AT the Birmingham County Court on Tuesday, before His Honour Judge Chalmers, an action was brought by the Pharmaceutical Society of Great Britain against Thomas Onion, of 135 Gooch Street, Birmingham, to recover two penalties of 5*l.* each, for selling poisons without being duly qualified. Mr. Granger, barrister (instructed by Messrs. Flux & Co. of London), appeared for the plaintiffs, and Mr. Hugo Young (instructed by Mr. Chinn, Birmingham), for the defendant.

Mr. Granger said the action was brought under 31 & 32 Vict., cap. 121. He relied on section 15 of that Act, which provided that persons who sold or dispensed poisons to the public should be duly qualified under a penalty. There had already been a case in the High Court upon the meaning of the words in the section, and judgment had not yet been delivered.

His Honour said he would reserve his judgment in this case until the High Court judgment had been delivered.

Mr. Granger said that practically the only question was whether the defendant was the man who sold the articles. His friend did not deny that what was sold were poisons within the schedule.

Harry Moon, clerk in the employ of the plaintiffs, said that on August 22 last he went to 135 Gooch Street. It was a chemist and druggist's shop, and the name outside was Onion & Co., Limited. He went in, and saw the defendant Thomas Onion, to whom he handed a prescription and asked him to make it up. The prescription was a belladonna liniment. Defendant handed the prescription to an assistant, and ordered him to enter it and make it up. Whilst that was being done witness asked defendant for 2*l.* worth of laudanum. Defendant got the bottle, took it to the assistant, and told him to supply the laudanum when he had finished the prescription. When the assistant had tied up the bottles, defendant handed them to witness and took the money in payment. On November 11 last he went again to the shop, and was supplied with belladonna liniment, the defendant again directing the assistant to make it up.

The Judge: Is Mr. Onion a registered chemist?

Mr. Granger: No.

Mr. Young: The business is carried on by a limited company. One of the directors is qualified. The question is whether this was served by the assistant within the meaning of the Act, or served by Mr. Onion. If served by the assistant, the penalty must be recovered from him, not from Mr. Onion. Mr. Young then cross-examined Mr. Moon, who said that he was a sort of spy for the Pharmaceutical Society. He did not give the defendant any name, but the name of Jenkins was on the prescription. On both occasions defendant took the money.

Mr. Granger put in the list of qualified chemists, and this closed the plaintiffs' case.

Mr. Young, in opening the defendant's case, said there were two people who must be looked to in a case of this sort—the proprietor of the shop and the actual dispenser of the medicine. It had been held that a company was not liable under this Act because the company was not a person. Referring to the report of the case now before the Divisional Court in THE CHEMIST AND DRUGGIST, Mr. Young said he thought they might assume that the person who actually dispensed the medicine would be held liable although he was acting on behalf of his master, the owner of the shop. But what the plaintiffs were trying to do here was to hit neither the proprietor of the business nor the actual dispenser, but the middleman, namely, the manager of the shop, whose part in the transaction was no more than that of a cashier or foreman at a general store.

The Judge: Do you say the actual dispenser was a qualified person?

Mr. Young: No, sir; and there is not the slightest doubt he is liable.

The Judge: There is no qualified person in the place?

Mr. Young: Yes, one of the directors is a qualified person.

The Judge: But he was not there.

Mr. Young: He was not there; but in a case of that sort the liability does not attach to anybody who carries on the business or is managing it. It attaches either to the owner of the premises or the vendor who makes up the prescription. Mr. Young at some length argued that the only person liable was the assistant, whose name was Attwood. He then called

Thomas Onion, the defendant, who stated that he was managing director of the company. One of the directors was a qualified chemist.

The Judge: He was; is he qualified now?—Defendant: Not at the present time. His name was W. Adcock.

The Judge: What has become of him?—Defendant: I discharged him; he was no use to me. (Laughter.)

The Judge: Oh! you discharged a director?—Defendant: Yes, for drinking.

Mr. Young: Attwood is not qualified?—Defendant: No.

The Judge: What experience has Attwood had? How old is he?—Defendant: He is eighteen.

The Judge: What experience has he had?—Defendant: He has been at it about a year. He is apprenticed to the company.

The Judge: Do you allow him to make up poisons without superintending him?—Defendant: Oh, no! never, unless I am at the back of him. I was in this case.

The Judge: There is no question after that.

Mr. Granger: I do not think I need ask any question.

The Judge: No; I shall find, as a fact, that this medicine was sold by Mr. Thomas Onion.

Mr. Young: After what he has said, that he stood at the back of the boy and superintended, I cannot contend otherwise.

The Judge: No; I wondered why you contended it all along.

Mr. Young: I should certainly have contended it most seriously if it had been as I understood it. It only shows the folly sometimes of calling evidence for the defendant.

The Judge: Then I will reserve judgment until after the decision of the Divisional Court.

## TRADE OR CASH DISCOUNT.

IN the City of London Court, on Tuesday, before Mr. Registrar Wild, Messrs. Lumley & Co., of 1 America Square, E.C., sued Mr. C. B. Inman, manufacturing chemist, of Stafford Street, Hunslet, Leeds, for balance of account for goods sold and delivered. The defendant pleaded a set-off for the amount of the plaintiffs' claim for discount, which he alleged he was entitled to, and which the plaintiffs had not allowed him. The plaintiffs' solicitor said his clients' terms were 10 per cent. discount, if paid within a month. For the defence an account was put in which showed that the discount had been allowed when payment was not made within that time. The plaintiffs' solicitor pointed out that on March 29 last a letter was sent to the defendant, informing him that the discount would not be allowed in the future unless the payments were made regularly.

The Registrar said that might be so, but upon again referring to the account he found that the plaintiff had waived that letter in August by allowing the discount after the expiration of the month. He thought the discount was in the nature of a trade discount, and not a discount for cash. He must give judgment for the defendant, with costs.

## A TRADE-MARK QUESTION.

IN the Chancery Division, on March 7, before Mr. Justice Kay, W. Meyerstein & Co. appealed from the decision of the Controller-General, who refused to register the word "Satinine" as a trade-mark for soaps, perfumery, starch, &c., sold by the applicants, and enumerated in classes 47 and 48.

Mr. R. Wallace appeared for the applicants, and the Attorney-General and Mr. Cutler for the Controller-General.

Mr. Wallace said Messrs. Meyerstein & Co. sought to register the word "Satinine" under the Act of 1883, but the Controller had deferred his decision pending legislation. The applicants renewed their application after the passing of the Trade Marks and Designs Act, 1888, and then the Controller gave his opinion in writing that "Satinine" was

not a proper word for registration. The matter was referred to the Board of Trade, who directed that it should be brought into court.

His Lordship: What are the applicants—are they manufacturers?

Mr. Wallace: No; they sell soaps, perfumery, and other articles.

His Lordship: And they wish to put the word "Satinine" as their trade-mark upon articles which they do not manufacture?

Mr. Wallace replied that that was so. The mark was duly advertised in the *Trade Marks Journal*, and no one opposed the application to register.

His Lordship: On what ground did the Controller-General refuse to register—was it that it was not a "fancy" word?

Mr. Wallace: No; but that it was not an "invented" word, as required by section 10 of the Trade Marks and Designs Act, 1888. The word "Satinine" cannot be found in any of the dictionaries. Section 64 of the 1883 Act required that a word to be the fit subject for registration must be a "distinctive" or "fancy" word; but the Act of 1888 altered that, and required that the word should be an "invented" word.

His Lordship: Then you say that by adding the letters "ine" to the word "Satin" you have invented a word?

Mr. Wallace: Yes.

His Lordship: Let us have an illustration. You take a common word like "soap," and you add "ine," and make "soapine" of it; and you say that that is an invention?

Mr. Wallace: Yes.

His Lordship: There would be a marvellously small quantity of "invention" about it.

Mr. Wallace: That is so; but the quantum of invention is of no consequence.

His Lordship: Then "soape" would be an invented word?

Mr. Wallace: Yes.

His Lordship: All right. "Logic is logic, that is all I say." I suppose you have read that extremely witty poem, "The One-horse Shay"? (Laughter.)

Mr. Wallace: But if the word is not in use it is an invention.

His Lordship: Now, if a man sold spades, could he register the word "spadine" as an "invention"?

Mr. Wallace: I should say not, because then he would be trying to manufacture the use of the word spade, which is the common name of the article sold. Now, in calling soaps and perfumery and starch "Satinine" there is no reference to satin cloths. If we sold satin goods as "satinine" there would be some apparent attempt to mislead the public. The word "satin-glaze" has been already registered as a trade-mark for starch, an article included in class 47. Now gloss, or glaze, is not a description of starch, for the gloss is the result of ironing, though I don't know much about starch.

His Lordship: We all know enough about starch without being washerwomen—(laughter)—to know that linen when dried will take a higher gloss after being starched than before. "Satinine" may be a description of the gloss or shine which may remain on the face and hands after using your toilet soap. The word "starch-glaze" is already registered, and as starch is one of the things you sell, you cannot register a word descriptive of the gloss or glaze which comes from the use of your starch.

Mr. Wallace said the matter was not capable of much further argument, but he again submitted that "Satinine" was an invented word within the meaning of section 10 of the 1888 Act, and as such was capable of being registered as a trade-mark. He put in and read the affidavits which had been filed.

Without calling on the Attorney-General,

His Lordship said the only invention was the putting at the end of the common word "satin" the letters "ine," and the word, as used in reference to starch, for example, gave one the idea of the gloss which would be produced by its use. With regard to the addition of the "ine," if that was inventing a word it was the easiest mode of invention which one could conceive. The applicants could not use any word, "fancy" word or otherwise, if it was descriptive of the article sold, and, in his opinion, "Satinine" was descriptive of a glossy surface, and was a recommendation of the starch, for instance, which would produce a glossy

surface. That was precisely what the Controller said, and he gave as a further reason that the word "satin-glaze" had been already registered for an article included in class 47. His Lordship dismissed the appeal with costs.

#### IMPORTANT DECISION UNDER THE INDECENT ADVERTISEMENTS ACT.

AT the Cardiff Police Court on Wednesday (before Mr. T. W. Lewis, stipendiary) William George Duck, chemist, High Street Arcade, was charged with an offence under sections 3 and 5 of the Indecent Advertisements Act, 1889. Mr. M'Lachlan, solicitor to the National Vigilance Association, who prosecuted, said that on March 5 his attention was attracted to the window of Mr. Duck's shop, at the end of the Arcade, near St. John's Square, when he saw the bottle produced in the centre of other articles. He purchased it, and paid 2s. 9d. The money passed, and the bottle was given to him outside the shop door. The bottle was labelled, and headed "Injection of Marico" [Grimault's]; and the matter which followed on the label stated that the injection would "arrest the most inveterate discharges." This referred to the matters mentioned in the sections of the Act, which Mr. M'Lachlan detailed. It was printed matter of an indecent or obscene nature, as provided against under section 3.

The Stipendiary: You say that it is an advertisement of an indecent and obscene character?

Mr. M'Lachlan: Yes, you may read it.

Mr. Belcher, who defended, argued that this was not so. He would like to ask witness if he had visited the Swansea chemists.

Mr. M'Lachlan: I decline to answer.

The Stipendiary was of opinion that Mr. Belcher was not entitled to examine the witness as to his credit, which he thought was well established.

Mr. Belcher, proceeding, said that although they were very pleased to see their friends, he still hoped that Mr. M'Lachlan would, for the future, confine his attention to Swansea. (Laughter.)

Examined by Mr. Belcher, witness denied he had made a running examination of all the chemists' shops in the town, and that this was the only one he could take a case against, for in fact his attention had been directed to this particular window by a police-sergeant.

The Stipendiary: Could you read this label from the street?—Yes, sir.—Well, I must compliment you upon your eyesight, for I can scarcely read it here.

Mr. Belcher: Why did you get the assistant to bring the bottle outside?

Witness: Well, I had my doubt as to whether it was necessary to deliver the advertisement in the highway to make it an offence.

Mr. Belcher: When you read this label your public sense of duty was shocked, eh?—No.

Well, your public sense of modesty then?—Go on.

The Stipendiary, addressing Mr. M'Lachlan, said that to persons of a perfectly innocent mind the advertisement would not have a bad construction, and therefore he thought it could hardly be called indecent. They were proceeding under a penal statute, under which an offence might be visited with hard labour, and he thought they should proceed with discretion. The Act must be strictly construed, and it appeared that the matter contained on the label of the bottle did not come within the meaning of the Act.

Mr. Belcher contended that since shop was not even mentioned in the section, the prosecution was bound to fall through.

The case was dismissed, and Mr. Belcher asked for costs, but Mr. M'Lachlan objected on the ground that the prosecution did not arise out of vindictiveness, but solely out of a desire to benefit the public. The Stipendiary, however, ruled that the defendant had been improperly summoned, and, therefore, deserved his costs.

A CASE against William Price, herbalist, Bute Street, for delivering and circulating certain handbills of an indecent nature was then proceeded with, but as it was stated on the summons, taken under section 3, that the defendant "did deliver," whereas it was an agent who did so, the Stipendiary

ruled in accordance with Mr. Belcher's argument that the summons must be dismissed, and granted a fresh one under section 4.

#### THE FRUIT SALT BAKING-POWDER CASE.

THE case of *Eno v. Dunn* was heard last week by the Lord Chancellor, Lord Herschell, Lord Watson, and Lord Morris, as an appeal to the House of Lords. Mr. J. C. Eno, the proprietor of "Eno's fruit salt," appealed against an order of the Court of Appeal reversing a judgment of Mr. Justice Kay, who refused a registration of W. G. Dunn & Co's. trademark, "Dunn's fruit salt baking-powder." Mr. Eno opposed the application to register on the ground that the term "fruit salt" was a phrase of his own invention, for the purpose of being applied by him and the general public to a saline preparation first brought out in 1873, and since sold in large and increasing quantities under the name of "Eno's fruit salt," and the term "fruit salt" had become universally known as denoting his saline preparation, and nothing else, and the term had never been used with reference to any other preparation except in fraud of his rights. The respondent, who formerly carried on business in Canada, but had since commenced business in England, applied to register as a trade-mark the words "Dunn's fruit salt baking-powder." This application was opposed by the appellant on the ground of his prior registration of his trade-mark, and of his user of the words "fruit salt." In June, 1887, the respondent applied to register another trade-mark, consisting of a label which contained very prominently and conspicuously the words "fruit salt baking-powder." The appellant gave notice of opposition to the application upon the grounds, amongst others, that it was an infringement of his trade-mark, and was calculated to deceive. The respondent delivered a counter-statement in reply, in which he disclaimed any right to the exclusive use of the words "fruit salt," and alleged that, as the appellant was not, and never had been, a manufacturer or dealer in baking-powder, he was not entitled to oppose the registration of a label including the words "fruit salt." He also denied that his proposed use of the words "fruit salt" was calculated to deceive, and alleged that it was impossible that baking-powder could be used for preparing a beverage, or that the appellant's preparation could be advantageously used for a baking-powder. The appellant, however, denies this latter allegation. The respondent stated, in his affidavits and in his cross-examination, that he adopted the name "fruit salt" as one descriptive of his baking-powder because he had read in Brande's "Manual of Chemistry" that there were certain salts which existed in fruits, and because he knew that cream of tartar, which was a main ingredient of his baking-powder, was one of the most important of such salts. The appellant points out, however, that the respondent had to admit that in Brande's "Manual" the phrase "fruit salt" was not to be found. The respondent admitted that he had seen in Canada advertisements of "Eno's fruit salt." The respondent alleged that there was not the least resemblance between the trade-marks. Mr. Justice Kay and Lord Justice Cotton, in the Court of Appeal, while agreeing that there was no resemblance between the trade-marks, were of opinion that section 73 of the Act had reference to this case, and that the exclusive use by the respondent of the words "fruit salt" as descriptive of his baking-powder would, by reason of their being calculated to deceive, be disentitled to protection in a court of justice, and consequently ought not to be registered in combination with a trade mark. The deception which the learned judges anticipated was that buyers of the respondent's baking-powder would believe it was an adaptation of the appellant's invention, and probably made by him. The respondent, however, says he seeks no exclusive use of the words, and that no one can acquire an exclusive right to them, or be prevented from using them in cases to which they fairly apply, and that they were far more applicable to his baking-powder than to the appellant's preparation. The former, according to the respondent, was proved to have as its main constituent bitartrate of potass, the commonest and most widely distributed salt in fruits, while, he said, by the evidence filed on behalf of the appellant, it was proved that the ingredients found by analysis in "Eno's fruit salt" were not salts found in fruit. The appellants claim, says the respondent, amounts to this, that, although he had no trade-

mark in the words "fruit salt," and had never used them except in combination with his own name "Eno," nevertheless no other trader could use the words, however accurately, as descriptive of an article of commerce, however unlike might be the articles, and however different the trademarks, without deceiving the public and inducing the belief that the article to which the words were applied was "Eno's fruit salt." The respondent submitted that that claim was unfounded, and that he was entitled both to call his baking-powder "Dunn's fruit salt baking-powder," and to register that name as part of his trade-mark, and in combination with a distinctive design. To hold otherwise would be to give in substance to the appellant an exclusive right to the use of this descriptive term, although it was incapable of being, and had never been by him, used as a trade-mark.

Mr. Aston, Q.C., on behalf of the appellants, said Eno had established a large trade with nearly all the countries of the world, and the article he produced had come to be known in the trade as "fruit salt." From ten to twenty dealers, wholesale and retail, deposed to the fact that the words "fruit salt" meant Eno's manufactured article. It was a new term when Eno introduced it, prior to which it had no scientific signification. It had never been used by any chemist, nor was it to be found in any chemical dictionary. Previous to Eno's introduction of it it was an unknown term. That was not denied on the other side. The result was, that Eno, by spending in some years from 14,000*l.* to 16,000*l.* in advertisements, made his manufactured article known to the world as "fruit salt." Up to 1866 Eno was the unchallenged proprietor of the words "fruit salt."

Lord Herschell: Probably without the words "fruit salt" the trade-mark could not have been registered at all. "Fruit salt" was clearly of the essence of the label.

Mr. Aston said it was a general impression that where words which became indicative of a man's goods became known in the market that, though he had not used them in a dissociated form, he was entitled to register. The outcome of the judgments in the Orr-Ewing case was that where men have used certain trade-marks, those trade-marks had certain salient features which had ear-marked them and identified them with the particular traders whose goods they had indicated, and the proprietors of those trade-marks were justified in registering the salient features.

Lord Watson: Eno's preparation was extracted from fruit or elsewhere?

Mr. Aston: Yes—or elsewhere. The ingredients of Dunn's preparation were disclosed; those of Eno's were not.

The Lord Chancellor: But, as a fact, did Eno's come from fruit?

Mr. Aston: So Eno alleged.

Mr. Moulton said there was no evidence on the point.

The Lord Chancellor said he could not understand how anyone wanting an aperient medicine would ask for baking-powder.

Mr. Aston contended that, whether that were so or not, the use of the words "fruit salt" by Dunn were calculated to deceive the public. He submitted that this was a case where a man about to begin a trade was desirous of appropriating to himself the benefit of the reputation acquired by another trader with reference to a particular article. In order to enable him to do that, he made a representation which was not an honest representation. Neither as regarded his object nor as regarded the means he employed was his proceeding of that straightforward character that would justify him in coming to the Controller and asking to be allowed to register as his exclusive property a label containing the catch words "fruit salt." Not only would that be calculated to deceive, but, assuming that Eno chose to embark, as he now could do, in the trade of selling his particular article for baking purposes, he would be unlawfully interfered with. This, he said, was not an honest attempt on the part of Mr. Dunn. He therefore asked that the judgment of the Court of Appeal should be reversed.

The Attorney-General, who followed on the same side, said if "fruit salt" were the same kind of description as "Brougham carriage," "Gladstone bag," "Hansom," or "Singer sewing machine," he should agree that Eno had no right to restrain Dunn; but if, as the evidence showed, "fruit salt" meant "Eno's fruit salt" or its derivative, then he thought previous cases were sufficiently in their favour to prevent Dunn registering.

Lord Herschell: You say "fruit salt" means the powder which Eno prepares?

The Attorney-General: Certainly. The words, he maintained, could only be properly applied to Eno's preparation, and they were not necessary in order to enable Dunn to describe his goods. It might be said—were they not depriving Dunn of the only words describing his goods? Why did Dunn not put "baking-powder extracted from fruit salt"? They could not restrain him putting any description on his goods to describe what they were. But he submitted that Dunn was not entitled to take as his trade-mark words which would be or might be understood by common people as referring to a preparation now known in the market only as "Eno's fruit salt."

The Lord Chancellor said the parties seemed to be so near each other that he could not help asking why they could not now do what they asked Mr. Justice Kay to do?

Lord Herschell: Dunn might call it "fruit salt extract baking-powder."

The Attorney-General doubted whether "fruit salt" was chemically or commercially a correct description of Eno's preparation, but it had been so described in the market. He could well imagine Dunn saying that the acids in his baking-powder were the same as used in "Eno's fruit salt." Of course he did not mean to make any admission that they were.

The Lord Chancellor thought it important to notice that in this case the trade-marks of Eno and Dunn were as unlike as anything could be. It was consequently the use of the two words "fruit salt" which could alone constitute the infringement.

The Attorney-General: Yes, because a person who went to buy "Dunn's fruit salt baking-powder" probably did not see at the time Eno's label.

The Lord Chancellor said he could understand that observation if they were articles of the same class.

The Attorney-General: But the public was not protected simply and solely because articles were not in direct competition. A wider discretion was intended to be given to the Controller; and if the fair inference from the evidence was that the public might think this was a derivative from Eno's preparation, their lordships ought to hold that such a trademark ought not to be permitted by the Controller.

Lord Watson: It was not necessary to use the words "fruit salt" at all. A man called a bag a bag because he could not well term it anything else, but to call this salt was putting the case a little too strong.

The Attorney-General: Yes; and if it were not to get the advantage of Eno's reputation, and to make the public believe that the maker of "fruit salt" was in some way mixed up with the "fruit salt baking-powder," he could not understand what the words were used for.

Lord Morris: He might want to get the advantage of the popularity of those two words.

The Attorney-General: Then I say he is not entitled to it.

Before retiring for luncheon, the Lord Chancellor again suggested that as the parties were so near they might come to terms. After luncheon, the Attorney-General said he was afraid they could not come to terms.

The Lord Chancellor said they must either settle or go on.

Mr. Moulton, Q.C., then addressed their lordships on behalf of the respondent. He said he could not help feeling that during the long arguments for the appellant his client had been represented as a man who had done a dishonourable thing, and who wanted to get the credit of the popularity of "Eno's fruit salt." So far was that from being the case, rightly or wrongly, his client felt that "Eno's fruit salt," being a medicinal preparation, would rather stand in his way. No person could have used the words "fruit salt" in connection with baking-powder in a way which, he should submit, more clearly showed that he had no intention of its being thought to be Eno's preparation. The appellant simply wanted to get indirectly what the law did not allow him to get directly—namely, a monopoly of the words "fruit salt."

Lord Herschell asked if Dunn was not seeking to get a monopoly of the words?

Mr. Moulton said certainly not; they did not want a monopoly of the words. Indeed, they had disclaimed any exclusive right to the words "fruit salt."

Lord Herschell: But suppose you had not disclaimed it. Do you say that any one if you had been registered, could also register, say "Jones's fruit salt."

Mr. Moulton: Certainly. They were bound to disclaim any exclusive right, because they said "fruit salt" were English words which anyone had a right to use. It was true Eno had called evidence to show that he was the only person making anything by the name of "fruit salt," and that people who asked for "fruit salt" meant Eno's preparation, but that was not sufficient to give him any proprietary in the words.

Lord Herschell: No; but it might be sufficient to prevent anyone else using them as a trade-mark.

Mr. Moulton said what he proposed to establish was that Eno had no proprietary rights in the words, and they must look at the conduct of Dunn and the rights of Eno from the point of view that Eno had no proprietary rights, and if that were so, then his client was entitled to have his trade-mark label. Eno clearly had no trade-mark in the words "fruit salt."

The further hearing of the case was adjourned.

## Gazette.

### PARTNERSHIP DISSOLVED.

Powell & Price, Ross, surgeons.

### THE BANKRUPTCY ACT, 1863.

#### RECEIVING ORDERS.

Drulif, Lionel (trading as Henry Lawrence, and as the Society of London Opticians), Hatton Garden, E.C., and Doughty Street, W.C., wholesale and manufacturing opticians.

West, Rowland Hill, Taunton, Master of Arts, and surgeon and apothecary.

#### FIRST MEETINGS AND PUBLIC EXAMINATIONS.

Harrison, William Salsbury, late of Sunderland, medical student—March 14, Official Receiver's office, Sunderland; March 13, Court House, Sunderland.

West, Rowland Hill, Taunton, Master of Arts, surgeon, and apothecary—March 18, Official Receiver's office, Taunton; March 19, Guildhall, Taunton.

#### ADJUDICATION.

West, Rowland Hill, Taunton, Master of Arts, and surgeon and apothecary.

#### NOTICES OF DIVIDENDS.

Critchley, William, Beeton, mineral-water manufacturer—first and final div. of 9s. 5*1/2*d., March 14, 16 Wood Street, Bolton.

Garlike, Edward William Bennett, Ipswich, surgeon—first and final div. of 1s. 8*1/2*d., March 12, Official Receiver's office, Ipswich.

Tyson, Thomas Balmforth, late of Worthing, pharmaceutical chemist—first div. of 4s., March 19, Official Receiver's office, Brighton.

#### APPLICATION FOR DEBTOR'S DISCHARGE.

Singleton, John, Kendal, physician and surgeon—April 8, Court House, Kendal.

### EXTRACT FROM THE REGISTER OF DEEDS OF ARRANGEMENT.

The following deeds of arrangement with creditors have been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1887. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision, in the Act, making any of these arrangements binding upon dissenting creditors.

Tesh, S. A. & Co. (Samuel Tesh, trading as), Nelson Yard, Broad Street, Park, Sheffield, and 63 Fox Road, Sheffield, druggist. Trustee: Cowton Appleby, Queen Street, Sheffield, accountant. Date, Feb. 28; filed, March 7; unsecured liabilities, 105*1/2* 7s. 8*1/2*d.; estimated net assets, 43*1/2* 17s. 6*1/2*d.; preferential creditors, 1*1/2* 2s. 6*1/2*d.

£ s. d.  
Fryers, Thomas & Co., Nelson (Lancaster) .. .. 24 0 0  
Keellog, D. C. & Co., Liverpool .. .. 26 10 0

(And fifteen under 10*1/2*.)

## BANKRUPTCY REPORT.

EWEN MACDONALD, 84 High Street, Cheltenham, Chemist and Druggist.

AT the first meeting of creditors of the above the statement of affairs submitted showed liabilities 200*l.* 6*s.* 6*d.*, and assets, stock, and fittings estimated to produce 150*l.*; good book debts 52*l.* 3*s.* 11*d.* The causes of failure were stated to be "bad health and competition in trade." The Official Receiver reported that the debtor commenced business about ten years ago with a capital of 230*l.*, which he borrowed of his brother. He had kept a day-book and credit ledger and the usual books of a chemist and druggist, but it was impossible for him to show at any time how he stood. He appears to have sold his furniture about six months ago to pay a creditor who had obtained judgment, and the cause of his filing his petition was that another creditor for 39*l.* had issued execution. He (Official Receiver) had advertised the stock for sale, but had only received one offer of 88*l.* Before accepting this he should get a valuer to inspect the contents of the shop. The matter was left in the hands of the Official Receiver.

## TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, at any time within one month of the date of this journal, give notice in duplicate, at the Patent Office, in the form 'J' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." All communications to be addressed to H. Reader Lack, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

From the "Trade Marks Journal," March 5, 1890.

Picturesque designs showing the god Buddha and other figures; also figures in armour fighting; also two elephants beneath a palm tree; and sketch of tiger; for chemical substances, raw and partly-prepared vegetable, animal, and mineral substances, and aniline dyes. By the Actien-Gesellschaft für Anilin-Fabrikation, Berlin. 93,950, 93,962, 93,963, 94,079, 94,080.

"CASSON BRAND" on shield surmounted with a knight's helmet; for paints, pigments, varnishes, &c. By Casson & Co., Great Richmond Street, Liverpool. 94,189.

The letter X with black impress of figure in gown; for chemical substances. By Hay, McNichol & Co., Kelvin Chemical Works, Maryhill, Glasgow. 94,659.

"RHIZOME"; for artificial and other manures. By the Phospho-Guano Company (Limited) Seacombe, Cheshire. 92,258.

"STAPLES' CATTLE CLEANSER," with sketch of a bull's head and sheep on label; for non-poisonous cleansers for cattle. By Staples Brothers, Bugg, Lincolnshire. 94,078.

"KEHOTAH"; for a medicinal preparation for human use. By L. A. Evanoviteh, trading as Holland & Co., 25 Hart Street, Bloomsbury. 93,325.

"BORTHWICK'S BOUILLON" and other wording on label and bottle; for an extract of beef. By F. L. & J. M. Borthwick, 3 Douglas Road, Canonbury, London. 93,645.

"UNAWATHE"; for food or ingredients in food. By the Tea Supply Association, 81 Southwark Street, London. 94,054.

Picture of harp, and lighthouse, sea, and ship in full sail; for food or ingredients in food. By Baker and Wright, 48 Patrick Street, Cork. 94,096.

"St. DUNSTAN," with sketch of church spire, for food substances and ingredients in food. By H. T. Mennell & Dodds, St. Dunstan's Buildings, Great Tower Street, London. 94,156.

"EUROPIEN" and "LOSOPHAN"; for new pharmaceutical products. 94,843, 94,844.

"ORTHODOX," with picture of native Indian and Chinese; for food substances and ingredients in food. By W. G. Dell, 8 Clapham Common, south side, London. 94,246.

"MAY MORN," "MAY DAY," and "MAY QUEEN"; for food substances or ingredients in food. By The Planters and Traders Association, 8 Eastcheap, London, E.C. 94,457, 94,458, 94,459.

From the "Trade Marks Journal," March 12, 1890.

"FINLAY'S SOAP," and sketch of plant; for chemical substances for veterinary and sanitary, &c., purposes. By Alexander Finlay, Ann Street, Belfast. 94,149.

"BLAIR'S GOUT AND RHEUMATIC PILLS"; for human use. By John Prout, trading as Prout & Harsant, 229 Strand, London. 87,049.

"FRAMPTON'S PILL OF HEALTH"; for human use; and "PROUT'S STICKING PLASTER"; for a medical and surgical sticking-plaster. By John Prout, trading as Prout & Harsant, 229 Strand, London. 87,051.

Circular strap label, with signature and other wording; for pills, ointment, rheumatic, gout, and cough mixture, and teething-powders. By R. Hutchinson, 156 Loughborough Road, London. 93,899.

Sketch of a castle, with landscape; for medicated and perfumed soap. By Alexander Ogston & Sons, Aberdeen, North Britain. 94,152, 94,153.

"ADONIS," and signature; for medicinie for human use and application. By D. Savage, 118 Shepherdess Walk, City Road, London. 94,225.

"MAGDALENE"; for oils for human use in medicine and pharmacy. By James Baker, 46 South Street, Worthing, Sussex. 94,254.

"HEPATONE," and other wording, on label; for a cure for liver complaint and indigestion. By H. C. H. Oliver, West Malling, Maidstone. 94,358.

"ALBATROSS BRAND," with sketch of an albatross; for food substances and ingredients. By G. Hooper & Co., Billiter Square Buildings, London. 93,994.

FRANKLIN'S "ARCTIC" and "ALERT AND DISCOVERY" sauce and relish. By Frederiek Franklin, Commercial Road, Landport. 94,418, 94,419.

"E. LOGSDON," as signature; for mineral and aerated waters. By E. Logsdon, Sun Brewery, Hitchin. 94,599.

"WALTER MOORHOUSE," as signature; for mineral and aerated waters. By W. Moorhouse, Wood Street, Wakefield. 94,600.

Sketch of a peacock; for mineral and aerated waters. By W. S. Dove, High Street, Rochester. 94,765.

"EIZZIL"; for a hair-restorer. By Elizabeth Robinson, Quarry Bank, Stockport Road, Timperley. 94,416.

"TELEGRAPH"; for perfumery and toilet articles. By William Gossage & Sons, Widnes. 94,788.

"DOOGIA"; for perfumery and toilet articles. By C. M. Luxmoore, 529 Battersea Park Road, London. 94,877.

LORD RAYLEIGH, of London, was on March 10 elected by a unanimous vote a corresponding member of the Academy of Sciences for the section of physics.

ENGLISH as she is advertised in a Japanese paper:—"This teeth powder is not common thing, as is sold in the world, it is powerful to hold the health of the teeth, and recover the teeth from its sick. If you only examine should find that it never tell a lie."

A MUSICAL DRUG.—A sentence catches our eye on page 389 of the new edition of the "Extra Pharmacopœia." A certain drug is spoken of as "supposed to contain a little violin." Unhappily it does not give rise to pleasant anticipations such as a Stradavarius would do, for it "resembles emetin in action." *Viola tricolor* is its source.

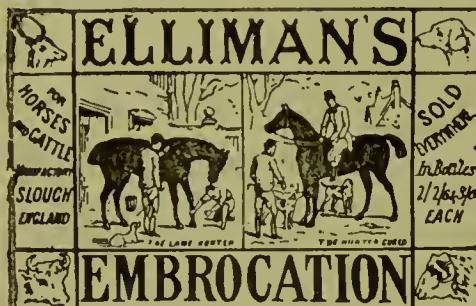
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See First Page, facing inside of front of Cover, in first issue of the month for latest particulars.

# EXALGINE

(METHYL-ACETANILIDE—C<sub>9</sub>H<sub>11</sub> NO).

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## EDITORIAL NOTES.

### CHEMISTS' PROFITS.

A PAPER called *The Lady* has lately published a very unlady-like and ridiculously unreasonable attack on chemists and druggists, giving some quite misleading statements concerning the profits on drugs and medicines. We notice that in the last issue of the same paper a somewhat lengthy refutation of the article appears over the signature of Wm. Hayes & Co., pharmaceutical chemists, Grafton Street, Dublin. We should have scarcely supposed that the writer in our contemporary was worthy of the attention given him, but Messrs. Hayes seem to have thought differently, and their reply is very complete. They point out first the expense of getting qualified. That means, they say, 250*l.* to 500*l.* Then they say that in THE CHEMIST AND DRUGGIST dozens of businesses are offered weekly, the gross returns of which are 500*l.* or under. They assert that the gross average profit for a retail chemist and druggist does not exceed 40 per cent., and calculating on this basis they show that a business whose annual returns are 500*l.* will yield only 200*l.* gross profit, and from this they deduct 40*l.* for rent, taxes, &c., 20*l.* for interest on capital, 80*l.* for an assistant, and 20*l.* for gas and other charges, leaving the poor chemist only 40*l.*

for himself. He may do without an assistant, but in that case "he is tied to his house of business as no man ought to be."

Messrs. William Hayes & Co. indicate besides a great many mistakes in prices made by the writer of the article to which they reply, his quotations being often given for crude articles, and the retail prices being those for pure drugs. But the most interesting item in their letter is a calculation in reference to dispensing profits. They take twenty prescriptions from a day's dispensing, without selection, and show as follows the actual cost and profit on these:—

No.	Ingredients		Price		No.	Ingredients		Price	
	used.	sold at.	s. d.	s. d.		used.	s. d.	s. d.	s. d.
1	..	0 3	0 6		17	..	0 2	1 6	
2	..	0 5	1 4		18	..	0 0½	0 2	
..	0 4	1 4			19	..	0 1	0 8	
4	..	0 4	1 6		20	..	0 0½	0 2	
5	..	0 3	1 4						
6	..	0 4	1 2					5 9½	£1 2 4
7	..	0 3	1 0						
8	..	0 1	0 2	Add bottles, pots, labels, wrappers,					
9	..	0 4	0 10	wax, &c.	..	3 0			
10	..	0 6	2 0	Assistant's salary	6 0				
11	..	0 3½	1 2	Messengers	..	1 8			
12	..	0 1	1 6						
13	..	1 0	2 2					16 5½	16 5½
14	.	0 7	1 6						
15	..	0 2	1 0						
16	..	0 3	1 4						
				Net profit to chemist	5 10½				

And here no allowance is made for rent, rates, taxes, gas, bad debts, &c. It must be remembered, too, that not a large number of chemists dispense 20 prescriptions per day; those who do more than that number will have to keep another assistant. Among the above are two for two pills each. Messrs. Hayes say, "We got 4d. for the two lots, and provided an envelope for the prescription, copied it in a book for the convenience of the customer, gave a box, label, and wrapper in each case. Is there any carpenter, bricklayer, or tradesman of any kind who would lift his tools for the money?" No; nor should any chemist do such work for such a price. There are not many customers who would not be ashamed to be worked for at that rate.

In the 20 prescriptions referred to, 12, we are told, contained a poison. The risks of damages which a chemist incurs have also, as Messrs. Hayes point out, to be allowed for, and they reasonably claim that the chemist who fits himself for carrying on a business of so much responsibility is entitled to such payment as will enable him to maintain a respectable position in society. Their analysis goes to show that his prospects of doing so are not very rosy, but it ought to enable the public to appreciate a little better his deserts, and the risks they run in purchasing their medicines from unskilled dealers.

#### THE LEGITIMATE DEMANDS OF CHEMISTS.

WE have been receiving and printing for some weeks past some stirring letters from Mr. Alfred Coleman, pharmaceutical chemist, Cardiff, who aims, as we understand, to thoroughly test the opinion of his fellow-members of the Pharmaceutical Society at the next election, and to get them elected, if possible, a body of men imbued with ideas more in accord with what he, Mr. Coleman, believes to be those prevalent among the rank and file of the Pharmaceutical Society and of the trade than are those with which the present rulers at Bloomsbury Square seem to be inspired.

We have given space to these letters with pleasure for

represented in the Pharmaceutical Council, or should at least ascertain by direct contest whether they can command enough votes to justify their claim that they represent the true views of the majority of the members; and, secondly, because in advocating his views Mr. Coleman has been quite definite in expressing himself, and has wasted no ink in vain apologies for his attitude, nor in idle abuse of the opponents whose policy he attacks. We have reason to believe that Mr. Coleman has been writing on behalf of a group of chemists in various parts of the country who have been planning—conspiring, if their opponents prefer the term—to effect a complete change of personnel at the forthcoming election. We have no idea of the strength of this insurrectionary movement; it has been conducted with considerable secrecy, and consequently we should suppose with some difficulty. But we may express the hope that at least a sufficient number of serious candidates ready to serve have been secured and will be nominated. Unless this is the case Mr. Coleman's letters have no meaning. Mr. Carteighe is quite justified in taunting his opponents with their inability to get men willing to supplant himself and his colleagues—willing, that is, to give the necessary time and labour. Unless these can be got, abuse of the present Council is mere vapouring.

In his letter this week Mr. Coleman indicates the ultimate object of his agitation. It is to obtain "at no distant date" an Act to restrict the dispensing, compounding, and vending of all medicines to the qualified chemist; and in order to attain this object, or rather to get the necessary motive power to work for it, he would alter the conditions of entrance into the Pharmaceutical Society so as to bring into that organisation the great majority of the registered chemists of the country. On these schemes we are obliged to part company with Mr. Coleman. Something like them may be realisable in the far future, but if they are put forward as practicable objects to work for now, we say that this is a proposition to waste more time and money on absolutely visionary projects. The idea of getting the whole trade to work as one man underlies everybody's plan, and if anything is established by experience, it is that nothing of the kind can be looked for. Moreover, apart from the fact that the outsiders will not come in, there is the other difficulty, that the insiders will not have them, and a very little opposition on the part of these to an invasion of their acquired rights would suffice to prevent any alteration of the Society's conditions by Parliament. But even assuming that all chemists could be got to unite in the suggested demand, does Mr. Coleman, or anyone else, know of any two members of Parliament who would back their claim to be the exclusive vendors of medicines when this proposal should be definitely stated in the form of a Bill? What we want from the Council is that they should get a great deal more out of their present Act; that they should enforce it vigorously, even against their own members, when necessary; that they should get it mended where it is defective, and enlarged where this is possible. These things could be done by a vigilant and well-informed Council without rushing into the opposite extreme of putting forward impracticable schemes which take no sufficient account of the forces which would oppose them.

#### THE DRUG TRADE IN COUNCIL.

THE proceedings at the annual meeting of the chemical section of the London Chamber of Commerce, on Wednesday, were largely taken up by a retrospect of the action of the section in 1889, and by the section to represent its

rates. The thanks voted by the section to Mr. Umney and his colleagues—Messrs. Howard, Fraucis, Evans, and Lescher—were well deserved, as the vast amount of time and pains-taking application which the committee have devoted to the question could undoubtedly have been turned to account in a manner more directly profitable to these five eminent representatives of the drug trade. In fact, the pity of it is, to our mind, that so much trouble and energy should have been expended upon an object of such purely academic interest. Mr. Howard's evidence at Westminster, which we reported a few weeks ago, was useful in placing on record the exact requirements of the drug and chemical trades; but apart from that evidence, and one or two other valuable contributions to the controversy, the fight against the proposed revision partakes largely of the classic assault upon the windmills. It would certainly be an excessively grave matter for all trades if the railway companies were ever to become so insensate as to apply the full powers which they are now seeking. The thick red line on Mr. Umney's chart in which he shows that the railway companies could pile up the rate on merchandise to a prohibitive figure looks alarming; but we cannot discover any reasonable ground for the assumption that they should suddenly adopt a policy directly opposed to that which they have followed hitherto, and proceed to bleed their customers to death out of pure cussedness. Mr. Umney shows that the railway representatives are coming round to the views of the traders. This is well, and it may be pointed to as evidence of the good effect produced by the opposition. Or it may be no more than an instance of the usual result of two business organisations discussing matters in which both are concerned, and then it might have been accomplished without the help of half a dozen lawyers. The observations of the chairman of the section show that its members are not to be allowed to recline among the Lotos eaters now that the Railway Commission is vanishing into a Scotch mist. Perplexing questions of great importance are already casting their shadows over the agenda pages of the coming session. There is the red spectre of the Labour question to which Mr. Tyrer alluded, and with which, from his association with a particularly turbulent quarter of political London, he ought to have special qualifications to grapple. The chairman said a word in favour of arbitration, and committed himself to the significant opinion that the reference of trade disputes to fixed arbitration tribunals will ere long be made obligatory by law. In the meantime, as a contribution to our enlightenment on a subject with which the chamber appears likely to be busy before long, we might suggest that that body would do well to obtain the fullest possible particulars of the working and the scope of the French *Conseils de Prud'hommes*, which are probably the nearest extant approach to those legal courts of which the chairman foresees the speedy establishment. The Merchandise Marks Act is also likely to obtrude itself again upon the attention of the chamber. In his very lucid and important observations on the working of that Act, the chairman put forward objection to the measure from the standpoint of the merchant as apart from the manufacturer, urging that the provision which requires the place of origin to be clearly stated upon the article, so far from acting as a deterrent, has been a magnificent advertisement for our Continental competitors, who have thereby been enabled to secure direct business relations with buyers across the seas, whom they previously served unwittingly through British intermediary. Mr. Howard Vincent is about to bring before Parliament the question of the desirability of revising the Merchandise Marks Act, and the Chamber of Commerce may

in this connection be invited to state its views. The direction in which the member for Central Sheffield desires to revise the Act may be surmised from the views which he has expressed with regard to the importation of foreign goods, including his proposal to make it compulsory to colour butterine bright red in order to protect the butter industry. The action of the chamber in regard to the Act is not easy to forecast, but it is clear that in the chemical section at any rate a discussion of the subject will reveal the existence of strongly opposing currents. The chairman regretted that we had no effective means of influencing our colonies to adopt the Merchandise Marks Act. This was surely a slip. As a matter of fact, that Act, or a measure very closely resembling it, is now in force in almost every colony of commercial importance, and certain continental states—Switzerland, for instance—are also taking steps to follow us in legislation of a similar nature. A third important question not unlikely to occupy the attention of the chamber during the coming year is that of patents and trade marks. It will be seen, therefore, that there still remains ample opportunity for the president and the members of the chemical section to add to their laurels by the accomplishment of practical work.

#### COMMENTARY.

COMPANY PHARMACY did not shine very brightly in the case of the Pharmaceutical Society *v.* Onion, which we report from the Birmingham County Court this week. The defendant was the manager of the business. He was himself unqualified, but seems to have relied for the pharmaceutical reputation of his company on the fact that they started with a qualified director. This qualified gentleman had, however, been discharged by his unqualified manager on the ground that he was of no use. The manager and a youth, also unqualified, managed the compounding and vending of poisons between them in such a way as to leave it open to argument which was the seller from a judge's point of view. We do not by any means imply that any confusion was intended, but it is obvious that the system rendered it possible to argue whichever was attacked that the other person was the seller. By a few questions, which, if it were not disrespectful to the Court, we might describe as "foxy," the judge led the defendant to give himself away, to the consternation of his counsel, and his chances of escaping the penalties sued for depend now on the very slender hope of a decision in favour of the appellants in the case of the Pharmaceutical Society *v.* Wheeldon in the Queen's Bench Division.

THE EXTRA PHARMACOPOEIA.—The sixth edition, making the 36th thousand, of this deservedly popular work has just appeared. It has been carefully revised, and in some sections condensed; but the new matter added necessitates a net increase of about 50 pages. The therapeutic uses and the pharmacy of the many modern chemical compounds used in medicine account for a large proportion of this increase. The authors, Messrs. Wu, Martindale and W. Wynn Westcott, M.B., are to be congratulated on the professional appreciation which their efforts have met, and pharmacists and medical men are equally to be congratulated on the carefulness and skill with which the salient points of modern pharmacy are presented in this handbook. We notice that the index has been considerably enlarged.

THE NATIONAL ASSOCIATION FOR THE EMPLOYMENT OF RESERVE AND DISCHARGED SOLDIERS.—We have received

the fourth annual report of this excellent institution, which seeks to get applications from employers of labour for suitable men as they leave the army. Firms who can make room for such men occasionally are likely to get well-trained servants, and will at the same time do the State some service, as the success of the short-service system in our army depends to a large extent on the prospects the men may have of finding occupation after their five years of military life. The offices of the Association are at 12 Buckingham Street, Strand, and Lieutenant-Colonel Boyes is its secretary.

**THE SALE OF PENNYROYAL.**—Dr. J. G. Marshall is of opinion that pennyroyal has a much more decided action as an ecbolic than medical men generally credit it with (*British Medical Journal*). The women who use it assert that it serves the purpose for which they intend it. There is, he says, great difficulty in collecting evidence as regards the real action of such a drug, and although chemists sell it in the full belief of Taylor's statement that it has no ecbolic property, at the same time they know that the catarrh for which it is asked is not one of the respiratory system. The purchaser naturally keeps her secret to herself, and will not relate her experience to anyone. Dr. Marshall is certain that Taylor's opinion requires considerable qualification, and thinks that the sale of pennyroyal indiscriminately by druggists should be forbidden.

**A STRANGE STOMACH.**—Dr. James McNaught, of Newchurch, near Manchester, gives particulars in the *British Medical Journal* of a case of flatulency, which showed certain remarkable features. The patient was a spare man of 24, who had had stomach troubles for fully four years. When he consulted Dr. McNaught the disorder had reached a serious stage, dilation of the stomach being excessive and continuing from meal to meal. Dr. McNaught emptied the stomach, and found the acidity of the contents to equal 3.2 grammes of caustic soda per litre, 0.55 gramme being due to volatile acid, and 0.18 gramme to lactic. The most curious feature, however, was in the gas which was given off. A preliminary experiment, with the stomach contents in a flask, had shown that it was inflammable, and to confirm this Dr. McNaught poured water into the man's stomach in a thin stream, and ignited the gas as it issued. The result was a flame of such dimensions that both doctor and patient were alarmed, and the experiment was not repeated. A sample of the gas was collected from the experimental flask, and an analysis by Dr. Bailey, of Owens College, showed that it consisted of 56 per cent. of carbonic acid gas, 28 per cent. of hydrogen, 6.8 per cent. of marsh gas, and 9.2 per cent. of residual air. Such a gas would indeed be inflammable. A microscopic examination of the stomach contents showed the presence of yeast-cells, as well as of a bacillus, which may be *Clostridium butyricum*, for it behaved like that organism; and one peculiarity of the flatulency was that there was no difficulty of noticing by the odour that butyric fermentation was active in the stomach.

**THE COMMERCIAL VALUE OF GREAT BRITAIN.**—At a recent lecture on this subject, delivered at the London Institute, Finsbury Circus, Mr. J. Scott Keltie, librarian of the Royal Geographical Society, stated that, including every scrap of land over which we had any claim, the area of the Empire was nearly one-fifth of the land area of the globe. It was nearly three times the size of Europe, and just about a million square miles less than the area of Africa. On this immense area lived something like 350,000,000 people. Thus, of the total population of the globe, about one-fourth or one-fifth were our fellow-citizens. An

agricultural country could never support a very dense population, and in so small a country as ours could never have much surplus capital for great enterprises or surplus inhabitants for purposes of colonisation. Our coal and our iron had, to a great extent, been the making of us, and had enabled us to avail ourselves of our geographical advantages. The total value of our trade had grown enormously within the past thirty years. In 1860 imports and exports together amounted to 365,000,000*l.*; in 1889 their value was 740,000,000*l.* Our imports thirty years ago were valued at 210,000,000*l.*, now they were 427,000,000*l.*; our exports thirty years ago were 164,000,000*l.*, now they were 313,000,000*l.* The population of the mother-country was to-day close on 38,000,000, or just about one-eighth part of the whole of her Majesty's subjects. The whole trade of the Empire might be valued, imports and exports, at about 1,200,000,000*l.*, of which about 68 per cent. was the share of the mother-country, leaving just 32 per cent. to the vast remainder of the Empire. This total trade of the Empire was just one-half of the trade of all foreign countries put together. About five-sixths of India's imports of merchandise came from us, while of India's own produce about three-eighths came to the United Kingdom. Whatever habitable parts of the earth were available for European settlement had fallen to the lot of English-speaking peoples, and among them we must reckon the United States, which we could not treat as a foreign country, and which did an annual trade of 300,000,000*l.*, of which 90,000,000*l.* was with the old mother-country, who in this matter stood far ahead of all others. In one form or another the English language was the medium of communication for something like 400,000,000 people—nearly one-third of the population of the earth; and some who tried to forecast the future thought it might yet become the universal language.

**AQUA LAUROCERASI.**—An interesting note on the relative yield of hydrocyanic acid from uncut and cut cherry laurel leaves is the outcome of an investigation undertaken by two Dutch pharmacists—A. van der Bovenkamp and W. van Eeck. Taking 2 kilos. of the leaves, one-half was cut and digested at 40° C. with 5 litres of water. The uncut leaves were similarly treated, and 1,750 c.c. from each was distilled after a few hours' digestion. Centinormal silver nitrate solution was used for titration, and fractional portions of the distillate were examined, with the following results:—

Uncut leaves			Cut leaves		
1. 500 c.c.	70.60 c.c. $\frac{1}{100}$ AgNO <sub>3</sub>	1. 500 c.c.	46.60 c.c. $\frac{1}{100}$ AgNO <sub>3</sub>	2. 200 "	2. 208 "
2. 200 "	38.76 "	2. 200 "	208 "	" "	" "
3. 200 "	10.56 "	3. 200 "	14.2 "	" "	" "
4. 100 "	8.12 "	4. 100 "	10.8 "	" "	" "
5. 200 "	6.8 "	5. 200 "	10.0 "	" "	" "
6. 150 "	5.8 "	6. 150 "	6.8 "	" "	" "
7. 200 "	4.1 "	7. 200 "	4.6 "	" "	" "
8. 200 "	2.4 "	8. 200 "	2.8 "	" "	" "

The fractions from 1 to 5, amounting to 1,200 c.c., gave in the case of the uncut leaves a water containing 0.106 per cent. of real hydrocyanic acid, while that from the cut leaves only reached the strength of 0.078 per cent. HCN. These results were corroborated in the main by duplicate experiments, the first 500 c.c. of distillate from 500 grammes of uncut leaves showing 0.099 per cent. HCN, and from cut leaves 0.057 per cent. HCN. It will be observed that these results indicate that the process at present followed by the British and some other pharmacopoeias is wrong in principle—indeed, it would seem to be impossible to distil 20 oz. of 0.1 per cent. water from 16 oz. of chopped and crushed leaves. Perhaps our Pharmacopoeia authorities will look into the matter.

## FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

PHARMACISTS REWARDED.—A number of medals have been distributed among members of the various councils of hygiene, as a reward for their devotion to the public good. Most of the distinctions fell to the lot of physicians, but a gold medal was awarded to M. Gebhart, a pharmacist at Epinal; a silver medal to Professor Blarez, of Bordeaux; and a bronze medal to Dr. Tisserand, a veterinary surgeon.

AGAINST ADVERTISING QUACKS.—The syndicate of Havre physicians have passed resolutions praying for the following additions to the Medical Bill now before Parliament:—(1) Anyone, not a doctor of medicine, who shall advertise that he will cure certain diseases, to be deemed guilty of illegally practising medicine. (2) If the delinquent be an *officier de santé*, pharmacist, dentist, or a midwife, to be in addition liable to temporary suspension from his privileges.

A NOVEL ANTISEPTIC PAPER has been devised by M. Duquaire of Lyons. The material consists of asbestos, with about five per cent. of ordinary paper pulp, worked into soft paper, and soaked in a petroleum-benzine solution of bees'-wax. The solvent having been evaporated off in open air, the tissue is ready for use. All that is necessary is to set it afire with a match, after which the paper, thus made completely aseptic, may be employed for dressing wounds, with or without iodoform or other antiseptics.

THE COMPETITION SYSTEM.—The situation of laboratory manager (*chef de laboratoire*) at the pharmacie centrale of the Paris hospitals having become vacant, it has been decided for the first time that the place shall be awarded by competition. The candidates must hold the degree of pharmacist of the first class, and not be over 35 years of age. At the competition, which is to take place on April 15, a goodly number of candidates will no doubt appear, and do their best to carry off the prize.

ETHYL AND METHYL FLUORIDES.—M. Moissan has related before the Academy of Medicine a series of experiments on animals, to compare the physiological action of chloric with fluoric ethers. Ethyl fluoride he found to be, like ethyl chloride, an anesthetic; but it is not easily manageable, because a slight excess proves rapidly poisonous. Methyl fluoride, on the other hand, was observed to cause undoubted anesthesia, easily obtained comparatively, and unaccompanied by previous excitement. Further experiments are in progress in the same direction, and so are others with fluoriform, a compound corresponding to chloroform.

HERBALISTS MAY NOT KEEP MEDICAMENTS IN STOCK.—David, a herbalist at Marseilles, was recently prosecuted for illegal practise of pharmacy, the specification being that he exposed for sale such pharmaceuticals as cantharides, whole and powdered, sugar of lead, potassium bromide, tincture of aconite, corrosive sublimate, &c. The defence was that none of the articles had actually been sold; but the court held that the goods, having been found among the usual stock of a herbalist, they were meant to be sold, and, besides, were kept in a way very liable to cause dangerous mistakes. The law which forbids all but qualified pharmacists preparing, retailing, or keeping medicinal preparations was plainly violated. The sentence was 500f. fine, and 5f. damages to the Marseilles pharmaceutical syndicate.

A LADY AT THE ACADEMY OF SCIENCES.—For the first time for years a lady was, last Monday, sitting among the academicians. The sight caused no little surprise; for if women have forced their way into the lecture-rooms at the Sorbonne, the schools of medicine and pharmacy, and even won by hard fight positions as hospital internes, the Academy of Sciences has remained obdurate, and refuses to admit ladies, as the Academy of Medicine does, to the seats reserved for the public. On this occasion the exception was in favour of Madame Halphen, the young and comely widow of the academician who died last year at the age of 44. M. Picard delivered an oration on the deceased member, after which the lady, who sat between her husband's father and younger brother, was gallantly escorted to the door by Perpetual Secretary Bertrand, while all the academicians stood up. The little ceremony shows that the learned body is not yet prepared to admit ladies to its sittings.

AMERICAN FROG IMPORTATION.—French and frog-eater were once synonymous terms, but they are so no longer now that Brother Jonathan beats the Gaul at his own batrachian game, and the other day capped the climax by sending live frogs to the Paris markets. The ranivorous habit is not new in America. As long ago as 1857 frogs' legs were freely offered in the New York market, and no self-respecting restaurant failed to have on its bill of fare the delicacy, fricé or fricassee, at least on Fridays. And as regards both size and flavour, Americans always claimed great superiority for theirs over the French leaping game. Certain it is that those western bull-frogs, called "Missouri nightingales" after their sweet nocturnal melodies, are giants in comparison with the puny European croakers. To meet the increasing demand in America they have found it profitable to have frog farms, and the surplus production is shipped abroad, packed in wet moss. Some of the specimens received are said to be enormous.

## GERMAN PHARMACEUTICAL NEWS.

(From our Berlin Correspondent.)

QUALIFIED ANALYSTS.—Some discussion is said to be going on in ministerial circles with regard to a "staats-examen" for analytical chemists who are to conduct analyses of foods. The Deutsche Chemiker Verein, which made an application at head-quarters for details of the scheme, was told that no definite conclusion had yet been arrived at.

BORAX AS A PRESERVATIVE.—The German Government has forbidden contractors to supply the navy with preserved articles of food containing boric acid. This order is the result of the trial of a new preservative composed of equal parts of borax and salt, which has been sold as harmless. It was found that persons partaking of meat preserved with this agent experienced gastric derangements.

THE BLACK BOOK proposed by the Hamburg branch of the Chemists' Assistants' Society, for the names of proprietors whose service it was not considered desirable to enter, has failed to attract much support, and at a meeting of the section of the Society in Alsace-Lorraine a motion was carried regretting the action of the Hamburg branch in proposing such an arrangement.

MEDICAL COMPETITION is very keen here. Not long since there were nineteen vacancies open for surgeons to workmen's clubs, and no less than 150 medical men (10 per cent. of the whole number in this city) applied, some even—a majority of this number—considering it desirable to call personally on the committees of these clubs, which consist of twenty-five workmen.

A CHEMICAL INDUSTRY SOCIETY.—There are a number of chemical factories round about Heidelberg, some of those in the neighbouring towns of Mannheim and Ludwigshafen having a wide-spread fame. This congregation of businesses similar in nature, employing a large number of men who have interests in common, has suggested to Victor Meyer, the successor of Bunsen, the idea of establishing a chemical society in Heidelberg, so as to afford the technical chemists in the surrounding manufactories an opportunity of an interchange of ideas and experience by means of regular meetings, &c.

THE ENTERPRISING BURGLAR has broken new ground by "cracking the crib" of a hospital dispensary, and clearing out therefrom the contents of the poison-cupboard. The object of so strange a selection of "swag" is rather obscure. It may be that the explorer contemplated a research on the action of poisons on the common, or garden, species of the genus *Felis*, or, possibly, he was altogether ignorant of the nature of the chemicals he took, and concluded that their value must be proportionate to the care taken of them. In any case, he must have upon his hands (for he could scarcely have found a market for them) a pretty general stock of the most powerful medicines, and he is said to have thoughtfully taken also the "Compendium," or hand-book, explaining the uses of the poisons. The public prosecutor gives notice of the theft, in the hope of embarrassing the present holder of the goods if he should try and dispose of his strange acquisitions.

## POST-CARD COMPETITIONS (JANUARY AND FEBRUARY.)

## THE LECTURE COMPETITION.

DURING the past three weeks we have been publishing a number of specimens of the outlines of lectures which we asked for in January. It will have been recognised that a great number of valuable suggestions were contributed, many of which will, we hope, bear fruit in the future, as so many of our previous competitions seem to have done, in the dissemination of information and the consequent development of business. There were a great many capital lectures suggested, and among them we found it exceptionally difficult to select the one most worthy of the prize. Some, otherwise excellent, lectures were ruled out on the ground that the proposed syllabus could not be got through in an hour; others we thought would be too expensive or too difficult to prepare. Bearing in mind that one of the principal objects of giving the lecture should be that of bringing results to the lecturer in his business, but without allowing this object to be too obvious, and also influenced by a preference for something a little out of the ordinary run, we came to the conclusion, after a careful perusal of all the cards sent in, to remit the guinea to Mr. C. Granville Wood, 30 High Street, Oldham, for his outline of lecture on the sick-room (page 294, March 1), and also to send half-a-guinea each to Mr. R. Fred. Reynolds, Wharfe Cottage, Shaw Lane, Headingley, Leeds ("Drinking Waters," page 256, February 22); Mr. C. C. Bell, Epworth ("Table Science, or Reason and the Roasting of Eggs," page 257, February 22); Mr. T. D. Wright, 33 Springfield Terrace, Lancaster ("Obtaining a Light," page 293, March 1); Mr. J. S. Clarke, 25 New Road, Spalding ("Hearing," page 295, March 1); and to Mr. R. H. Ludwig, Assistant to Mr. F. E. Johnson, Halesworth ("Photography," page 295).

## THE PILL-MILL.

It is a little difficult for the modern chemist and druggist to realise that a few generations since pills occupied a comparatively minor position amongst the official and unofficial forms of medication. The pill has, doubtless, always been used in medicine; certainly its position is proverbial as the form in which the most bitter, nasty, or nauseous substances should be administered. Perhaps it was for that very reason that the apothecaries of last century seldom prescribed pills for their well-to-do patients; they reserved them for servants and poor people, and dosed the more fortunate ones with draughts and balsms, which were more easily swallowed, and possessed the commendable virtue of being more expensive.

In these latter days the order of things has been radically changed—high and low, rich and poor, prince and pauper reach a common level when they pass the portals of Esculapius and Galen. All have to contemplate the possibility of the pill. The march of civilisation seems to have effected this community of suffering. Hard work, fierce competition, and riotous living have engendered new disorders of the human system which call for speedy treatment and portable physic. And pharmacy, by introducing some improvements into the pill-mill, has made the popular pill a possibility. The days of the gilded pill are past. Such extravagance is reserved for the pedantic spendthrift. Sugar and chalk have worked a revolution, and a little more care on the part of the pharmacist has effected such a reduction in the size of the pill itself that the throat has capitulated to its concentrated horrors. So it has happened that in these last years of the nineteenth century the chemist and druggist has become more than ever a pill-maker, and pill-selling threatens to eclipse all his other functions.

The drug trade is well aware of this change. How, since Cox, of Brighton, began to offer coated pills to the trade, this practice has gradually extended until pearl pill-coating is done in almost every pharmacy, and an important special industry has gradually been formed—the factory-made pill industry, to wit. The public has become so addicted to pill-taking that it is difficult for retailers to supply the demand, so that wholesale firms have found it necessary to start pill

departments, with steam-driven machinery and trained pill-makers. The consumption of proprietary pills has also increased enormously, this being due mainly to extensive advertising, a cheap newspaper press, and the possibility, therefore, of addressing all classes of the population upon the ills which flesh is heir to. There seems, in short, to have been a conspiracy of circumstances to make the pill-mill go. What may its total produce be?

This was the problem which we desired the trade to assist us in solving, and we have to acknowledge a very general response to our inquiry. We asked those who joined in this competition to give us an average estimate of the number of pills supplied to the inhabitants of the British Isles every day, the figures being based upon the number of pills sold in each of the 10,000 pharmacies in the kingdom during any one week of the month of February. Obviously, this is a very fair basis for calculation, but to come even nearer to correctness we asked competitors to include in their estimate what they thought doctors, grocers, stores, and other pill-sellers are likely to distribute daily. After going carefully through the post-cards which we received, we find that

5,643,961

is the number of pills which our subscribers estimated to be consumed in the British Isles daily. This is an astonishing number, but not, we believe, an exaggerated calculation, and those who manufacture pills in large quantities will agree that the estimate is very near the truth. One maker told us recently that he sells to one house in Scotland no less than 1,000 gross of Blaud's pills at a time, and we understand that this supply is frequently repeated. The computation given by our subscribers provides for one pill per week to every man, woman, and child in the kingdom. Taking the average pill to weigh 3 grains (exclusive of coating), a year's supply would weigh 178 tons, or sufficient to fill a train of thirty-six ordinary railway waggons. It would take two powerful engines to haul this battery of latent force. If the pills were placed close together they would stretch out to a distance of nearly 6,500 miles—would, in short, make the journey from Liverpool to New York and back again. Such are some of the outcomes of this interesting competition. One of its conditions was that we should give a guinea to the competitor who sent in a number nearest to the average, and we have pleasure in awarding this to Mr. Harold Keene, care of Mr. G. E. Bridge, The Firs Pharmacy, Bournemouth, whose estimate was 5,648,000.

## NEW COMPANIES.

DENAEMYER'S PEPTONOID AND EXTRACT OF MEAT.—Capital, 200,000*l.*, in 10*l.* shares, of which 19,000 shall be A shares and 1,000 B shares. This is a reconstruction of Denaeyer's Peptones Company (Limited), which was incorporated in June, 1858, with a capital of 10,000*l.*, in 10*l.* shares, purchasing from Alphonse Florent Denaeyer, of Brussels, the sole and exclusive right to use and work certain processes for the sum of 40,000*l.* as a floating charge on the undertaking of the company. The returns of October 8, 1888, and June 25, 1889, respectively, record the issue of the total number of shares upon which calls to the amount of 70*l.* had been received, and 993 shares were agreed to be considered as paid up. The resolution for reconstruction was confirmed on January 13, 1890. Borrowing limit, 20,000*l.*

PHOSPHORUS COMPANY.—This company has been formed to manufacture phosphorus and chemical products in general, and carry on any other trade, business, or manufacture auxiliary thereto, adopting therefore a provisional agreement of February 6, 1890, made with Frederick Walton, relating to the sale of certain letters patent, respectively numbered 14,962 and 17,719, and other English, foreign, and colonial patents, upon terms and conditions the particulars of which are not scheduled with the articles of association. Capital, 150,000*l.*, in 10*l.* shares, of which 7,500 are 7 per cent. cumulative preferential shares, with right to division of surplus profits beyond 7 per cent. *pro rata* with holders of ordinary shares. First directors (three to six):—Sir Henry Mance, George Dibley, John Cunningham, Colonel C. Mure-Steel, Leonard Balfour Burns, and George Readman. Borrowing limit, 50,000*l.*

## ANALYSTS' NOTES.

THE last number of the *Analyst* contains several items which are of direct interest to chemists and druggists, but not yet has the Society which controls the journal taken the opportunity to bring before its members, through their organ, any record of the tincture of rhubarb case which was unsuccessfully prosecuted in the early part of the year, and which was due in part to the erroneous information given in a paper published in the *Analyst*. The analysts are very careful in looking after the work of their pharmaceutical brethren. Thus, in a paper on

## A RAPID METHOD OF ESTIMATING QUININE IN MEDICINE

(which title, by the way, is peculiar, for surely a thing containing quinine must be medicine), Dr. Seaton and Mr. H. Droop Richmond tell their fellow analysts how to go about the catching of the druggist. The formula is, first, an inspector properly appointed; second, a physician's prescription in writing, for the purpose of obtaining a sample of medicine for analysis. The analyst, in concocting a prescription, must have regard not only to the suitability of the drug—simple or combined, from the analytical point of view—but to its exhibition in forms or doses usually prescribed by English practitioners in medicines. Lastly, there is the innocent man who is to supply the medicine, a third of which will form the analyst's sample. The authors are kind enough to give us an example of what they mean—"a not uncommon prescription," they say, "for a quinine mixture":—

Quinine sulphatis	..	..	..	gr. xij.
Acid. sulph. dil.	..	..	..	iiij.
Aqua destillatae	..	..	..	3 viij.

Dispensers will know this when they see it again; and in connection therewith it is as well to note that analysts regard *too much* as adulteration as well as *too little*. We have little sympathy with inaccurate dispensing; it is the pharmacist's most onerous and most pleasurable work, and should always be carried out with due regard to the patient's interests and the physician's intentions, and, sometimes, the analyst's vigilance.

Dr. Seaton and Mr. Richmond give a method of estimating the quinine in such a mixture as the above. It is this:—

"To 25 c.c. of medicine add 2 drops of methyl orange (25 grm. in 1 litre of water) and 2 drops of phenolphthalein (5 grm. in 1 litre of 50-per-cent. alcohol), titrate with  $\frac{n}{10}$  baryta solution until the free acid is all neutralised, which is shown by the red colour just changing to a brown. Note the number of c.c. used. Continue titration until the pink colour of the phenolphthalein appears. Care must be taken not to overshoot this last point, as the colour does not develop quite immediately. The difference between the two titrations, multiplied by the factor 0.0218, gives the weight of the quinine sulphate (*i.e.*, the 7-molecule of water hydrate) in grms. in the 25 c.c. The number of c.c. in the medicine prescribed is known, and the calculation becomes a simple proportion sum. The method is, of course, not applicable in the presence of salts, of which the base is precipitated by hartya."

This is not recommended in preference to Allen's ammonia and ether gravimetric method, but the latter is tedious and "necessitates the use of an expensive reagent, *viz.*, ether," so the authors recommend their plan as a preliminary way. Their results show that it is reliable, but we protest against that hyper-economical spirit which objects to the use of a few pence worth of ether when the reputation and interests of citizens are at stake.

## METHYLATED SWEET SPIRIT OF NITRE.

There is a great deal of this about at present, Dr. John Muter tells us. "From what I have seen," he remarks, "the regularly licensed chemists and druggists do not patronise the makers of the article to any great extent, but it chiefly finds its way to cutting stores and oilmen, who undersell the pharmacist in all his articles not included in the poisons schedule. There ought to be introduced into

the next B.P. some simple method whereby the stuff can be readily found out in a few moments. An entirely reliable test is to put some of the sample into a glass, with a lump of solid caustic potash (about the size of a small hen), and stir till nearly dissolved. Spirit made from rectified spirit will lose all its odour of nitrous ether, and, after standing for half an hour, will not have become darker than the very palest tint of straw-colour (not visible by gas-light), and it will then only have the odour of plain rectified spirit. The methylated article, on the other hand, will become of a dark colour, varying from deep yellow to orange red, and will give off the well-known odour of methylated spirit in all its nakedness." This test of Dr. Muter's is at least simple, although our experience is that saponification of the spirit does not render it wholly inodorous, because there are odorous bodies in sweet spirit of nitre—paraldehyde, for example—which are not attacked by the alkali. However, the odour of naphtha is more powerful than it. The Dutch Pharmacopœia test is a good one. In this 5 c.c. of the spirit are mixed with 10 c.c. of ammonia, and to this are added 2 c.c. of a solution of iodine 1 part, and potassium iodide 2 parts, in 17 of water. After the black precipitate which is formed is dissolved, a further addition of 2 c.c. of the iodine solution should not, in half an hour, cause the separation of iodoform crystals.

## COTTON-SEED OIL IN LARD.

Mr. Frank P. Perkins finds in testing lard that if about 02 to 03 grammes of powdered potassium dichromate be mixed with a few drops of concentrated sulphuric acid in a porcelain dish, and about 5 grammes of the lard be then introduced, on stirring well a second time, adding water, and stirring again, there will in the presence of cotton-seed oil be a green colour developed, due to the change of chromic acid to chromic oxide, but if the vegetable oil be absent the yellow colour of the dichromate will still prevail. The colour should not be judged until water has been added, and the mixture stirred for some seconds.

## NOTES FROM KEW.

## INDIAN YELLOW, OR PURREE.

In the March issue of the "Bulletin" interesting particulars are given regarding the origin and composition of Purree. There has always been some doubt about it. It was believed to be the urinary sediment of the camel or buffalo, after the animal had fed on decayed and yellow mango leaves, but nobody was quite sure. Dr. Hugo Müller made some inquiries at Kew in 1883, and the Kew authorities set the India Office to work, with the result that an official of the Revenue and Agricultural Department of the Government of India proceeded to Monghyr, a town in Bengal, to see how it was obtained. There is a purree—or, more correctly, "piuri"—of mineral origin imported from London; this, of course, differs materially from the genuine article. The official found that the latter is really obtained from the urine of cows kept by a set of gypsies, or milkmen, residing in a suburb of Monghyr, who are the only people who manufacture the purree. They feed the cows solely with mango leaves and water, which increases the bile pigment and imparts to the urine a bright yellow colour. The cows are made to pass urine three or four times a day by having the urinary organ rubbed with the hand, and they become so habituated to this that they cannot urinate unless this is done. The urine is collected, and at night heated in earthen vessels, whereby the yellow principle is precipitated. It is collected, made into balls, and dried first over a charcoal fire and then in the sun. The price paid to the manufacturers of the article is 1s. 8d. per lb. A cow yields about 2 oz. per day, this quantity being the product of 3 quarts of urine.

The chemical composition of "piuri" has been ascertained by Professor Græbe to be 51 per cent. of euxanthic acid ( $C_{19}H_{16}O_4$ ), magnesium 4.2 per cent., calcium 3.4 per cent., silica and alumina 1.5 per cent., water and volatile substances 39 per cent. In a previous issue (*C. & D.* p. 213), the mode by which Indian yellow is prepared for artists has been explained. Professor Græbe gives a similar explanation, and

proceeds to throw out some suggestions as to the probable origin or colouring matter in the animal's system. He advances satisfactory reasons for believing that the euxanthinic acid exists in the "piuri" as a magnesium salt, and states that, although the free acid has a pale colour and its salts are also yellowish, it is the magnesium salt which is most remarkable for its fine yellow colour. The acid splits up into glycuronic acid ( $C_8H_{10}O_7$ ) and euxanthone ( $C_{11}H_8O_4$ ) when treated with weak acids. When euxanthone is given to dogs or rabbits, which have previously got such bodies as camphor or chloral, it appears in the urine as euxanthinic acid. This is because the aromatic bodies induce the elimination of glycuronic acid, and the euxanthone uniting with this, euxanthinic acid is the result. Hence the inference that mango leaves contain euxanthone.

#### BARILLA.

It would appear that, in spite of nearly a century of Leblanc soda and a decade or more of the ammonia-produced alkali, there are people in the world who still prefer to use the old-fashioned carbonate of soda or barilla, which was made years ago in Spain from various species of *Salsola*. It still is made in Alicante, but only to the extent of 200 to 250 tons per annum. The Kew authorities thought the natives of India might take up the industry, and with a prodigal disregard of the cheapness of the manufactured alkali, they in 1884 brought the matter under the notice of the Foreign and India Offices. The latter replied through Dr. George Watt, in August 1885, and now the information is published to the world at large. Perhaps there were good reasons for delaying the publication of the communication until now. Dr. Watt tells us that barilla—Khár-sajji it is now called in India—is manufactured in the Punjab in a very similar way to what it is in Spain. 8,000 to 10,000 maunds of it are manufactured in Shalpur every year, and the price has risen since 1865. In fact, there is no evidence that the introduction of Leblanc soda has injuriously affected the barilla trade. In Sind the alkali is also manufactured, and we also learn that less than half a ton of manufactured soda is imported annually, barilla being preferred. This is made from *Salsola* plants grown in the vicinity, and the alkali made from it is produced in cakes 18 inches in diameter and about 8 inches thick.

### Practical Notes and Formulae.

#### SUGAR-COATING PILLS.

HECKER'S method is as follows:—The dried pills, after being moistened with a little syrup in a saucer, are placed upon a sheet of paper covered with a thin layer of powdered sugar, where they are rolled about by the hand until completely enveloped. The whole are then gently shaken upon a hair-sieve to remove the excess of powder, after which the pills are dried without the application of heat, which would cause their surface to crack. A single coating is quite sufficient in most cases, but the process may be repeated once or twice after the first drying. Pills coated in this way are not so beautifully smooth and glossy as those turned out by machinery, but they are very white and round, and, after a little practice, can be prepared offhand.

#### TYPE-WRITER INK.

PROF. E. B. SHUTTLEWORTH recommends castor oil as a solvent of the aniline colours for making type-writer ink. He says that on the small scale the incorporation and solution of the aniline colour in the oil may be accomplished by triturating the previously powdered colour with the oil in a mortar. The use of a little alcohol will sometimes be found to facilitate this operation. This process he has communicated to the *Scientific American*, and in the *Canadian Pharmaceutical Journal* he says that such inks may be put to other purposes. One of these is the preparation of printing-ink for railway and other commercial forms which require an ink which will copy with the written portion. The colour may be ground in castor oil in the same manner as the pigments ordinarily employed in varnish. Druggists could also in like manner produce an ink for use on stamping-pads.

This would not dry up or become sticky, like the compounds containing gelatine, glycerine, gum, sugar, &c., and, if too thick, could easily be made of the proper consistence by the use of a few drops of strong alcohol.

#### LABEL VARNISH.

							Parts
Sandarac	..	..	..	..	..	..	53
Mastic	..	..	..	..	..	..	22
Camphor	..	..	..	..	..	..	1
Lavender oil	..	..	..	..	..	..	8
Venice turpentine	..	..	..	..	..	..	4
Ether	..	..	..	..	..	..	6
Alcohol	..	..	..	..	..	..	40

All by weight.

Macerate the ingredients for several weeks until fully dissolved. The result is a limpid, colourless, brilliant varnish, which dries quickly and is not too brittle.—*Arch. de Pharm.*

#### A GOOD TOOTH-PASTE.

MR. O. P. MEHLFRIEDEL, of New York, informs the *Western Druggist* that, after trying every possible formula to obtain a good tooth-paste, he found the following, his own combination, a very suitable one:—

Calcium carbonate, pre-pitated	..	..	1½ oz.
Sugar	..	..	..
Potassium bilartrate	..	..	½ drachm

Make them into a paste with

Glycerine	..	..	..	..	2
Rose water	..	..	..	..	2

and add this to the following solution, effected by heat—

Castile soap, white (or good glycerine soap)	4	drachms
Alcohol	..	..
Rose water	..	..

And finally, after cooling, add

Oil of peppermint	..	..	..	..	60
Carmine, dissolved in ammonia	..	..	..	..	30

#### FOR CHAPPED HANDS.

THE following application is said to be an excellent one, especially for those who have their hands much in water:—

Menthol	..	..	..	..	12
Salol	..	..	..	..	13
Olive oil	..	..	..	..	20
Lanoline ointment	..	..	..	..	1

Rub the menthol with the salol and the olive oil, then mix in the lanoline.

This ointment has a wonderful effect in relieving smarting; it softens the skin and causes the fissures to heal rapidly. It may be rubbed on the hands twice a day or oftener.

#### PURGATIVE CHOCOLATE.

GIRAUD, a French pharmacist, speaks well of a preparation made as follows:—

Cacao (powdered and freed from oil)	..	..	50
Sugar (powdered)	..	..	100
Castor oil	..	..	60
Essence of vanilla	..	..	q.s.

Make into tablets.

The oil should be incorporated with the cacao, and the sugar and vanilla added. The ingredients must be well worked up upon a heated slab, and allowed to cool in moulds.

#### ALMOND LOTION.

Bitter almonds, blanched	..	..	..	4
Orange-flower water	..	..	..	12
Curd soap	..	..	..	½
Rectified spirit	..	..	..	4
Essential oil of almonds	..	..	..	20
Oil of bergamot	..	..	..	1

Dissolve the soap in a water-bath with the orange-flower water, beat up the almonds in a clean mortar, gradually adding the soap and water, strain through a clean washed muslin strainer and return to the mortar, and while stirring gradually add the spirit in which the oils have been dissolved.

## Trade Report.

**Notice to Retail Buyers:**—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollect that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., March 13

THE principal feature of our drug and chemical markets this week has been an absence of violent price-fluctuations and a steady trade in a large number of articles. Among chemicals there are signs of a decided revival in citric and tartaric acids, which have long been neglected, and for which the principal season of consumption is now approaching. Cream of tartar is also several shillings dearer. Oxalic and acetic acids are firmer in tone, and the salts of silver are following the upward course of the metal. A fresh advance has occurred in refined camphor. Glycerine is also somewhat firmer again, but sulphate of copper and antimony give signs of weakness, and quinine is distinctly lower. Chlorate of potash commands somewhat higher rates, and the recent advances in permanganate and acetate of lead are fully maintained. In drugs we have to report a slight decline in cinchona bark, a quiet but steady market for opium, and somewhat easier rates for Canada and copaiba balsams, golden seal root, menthol, and oil of olives. On the other hand, the following articles are either very firm or quoted dearer—ambergris, raw camphor, Peru and to'nu balsams, speimaceti, castor oil, insect flowers, saffron, beeswax, and cod-liver oil. As regards the outside markets, shellac is irregular of sale, lower for fine orange, but rather dearer for garnet; turmeric and cutch are dearer and in demand; Gambier slightly easier. Kowie and olibanum gums remain firm, and Zanzibar animi at to-day's auctions maintained the advance established in the private market. Soda crystals are worth less money, but caustic is dearer, and bleaching-powder shows a firm market. Zanzibar cloves, mace, new Jamaica ginger, black and white pepper are easier, and so is rape oil; but higher rates are quoted for turpentine, linseed oil, and cocoanut oil.

**ACIDS.**—*Citric*: A further rise in the convention prices is anticipated. *Citric* has advanced fully  $\frac{1}{2}$ d. during the week, and we hear that business has been done to-day at 1s. 3 $\frac{1}{2}$ d., though yesterday 1s. 3d. would still have bought 1s. 3 $\frac{1}{2}$ d. is now generally asked. *Oxalic*: also dearer, and not obtainable now under 1s. 3 $\frac{1}{2}$ d. *Tartaric*: declined early in the week, and sales were then made as low as 1s. 1 $\frac{1}{2}$ d., cash terms, for foreign. During the last two days, however, there has been a very strong demand, and the market closes decidedly dearer, English, at 1s. 3d.; foreign, at 1s. 2 $\frac{1}{2}$ d. on the spot.

**ALOES.**—Reports from New York state that the heavy quantities of common *Curaçao* aloes which have depressed the market there lately have been purchased for consumption. There is only a very slight indication of any improvement in value, however.

**AMBERGRIS.**—There has been an arrival this week of about 30 oz. of fine grey ambergris, which came here *via* America. Part of it has already been sold at an extremely high price, and the rest, we believe, is going to France. There is some more offering from abroad at about 180s. to 185s. per oz.

**ANTIMONY.**—Prices are declining, but it is difficult to give close quotations. The latest price which we heard mentioned for crude *Japanese* was 50*l.*, and for distant arrival lower prices were named.

**AMMONIA SALTS**—*Carbonate* dull, at 3 $\frac{1}{2}$ d. to 3 $\frac{1}{4}$ d. *Sal ammoniac*: firm and in good enquiry; first quality crystals at 37s.; seconds at 35s. *Sulphate* dull and unchanged;

Beckton 11*l.* 12*s.* 6*d.*; London, 24 per cent., grey, 11*l.* 16*s.* 3*d.* to 11*l.* 17*s.* 6*d.*; Hull and Leith, 11*l.* 15*s.*

**ARSENIC** maintains its recent advance, best white powder, 13*s.* 9*d.* net landed.

**BALSAMS.**—*Canada* balsam is neglected and prices are rather easier at 1s. 3 $\frac{1}{2}$ d. to 1s. 5 $\frac{1}{4}$ d. c.i.f. terms, according to quality and packing. *Cupaiuba*: In New York there is an easier tone for Maranham balsam, which is coming forward in rather larger quantities, and further shipments are thought to be on the way. *Carthagena* and *Angostura* balsams are also offered more freely. The prices now asked range from 2*s.* 7*d.* to 2*s.* 9*d.* c.i.f. for the best grades. *Peru*: The Continental speculators who have lately taken this article in hand again have bought largely in New York, and the price has advanced there to 4*s.* c.i.f. terms. *Tolu*, which had fallen to a very low figure, has also attracted the attention of French and German operators, who have taken about 150 packages out of the American market. The price from New York still comes at 1s. 3*d.* to 1s. 3 $\frac{1}{2}$ d. per lb. e.i.f., but there is every prospect of an early improvement.

**BENZOL.**—Dull and easier to buy. 90 per cent. at 3*s.* 6*d.*, 50 per cent. 2*s.* 7*d.* to 2*s.* 8*d.*

**BORAX**—Steady but unchanged, from the second-hand refined may be bought at 28*s.* 6*d.*

**CAMPHOR (CRUDE).**—Since our last report there have been several transactions in raw Japan camphor, shortly due and for early arrival at 195*s.* per cwt. c.i.f. terms, which showed a slightly easier tendency; but to-day the price has again hardened, and we have to report a transaction of 200 piculs, ship named, at 10*l.* c.i.f. Hamburg. A few days ago a small parcel is also said to have been sold at 10*l.* 2*s.* 6*d.* c.i.f. London; and we hear of some business on the spot at 10*l.* 10*s.*, though we have not been able to confirm that statement. The 50 tubs bought in at the last drug auctions have since, we believe, been sold. From America the reports are also exceedingly firm. It is said that the average yearly consumption in the States during the last four years has been 2,100,000 lbs., while imports of crude camphor for the year ending February 10 show a decline of 1,200,000 lbs. as compared with the preceding year.

**CAMPHOR (REFINED).**—We have to report a fresh advance this week. Two of the English refiners a few days ago put up their quotations from 2*s.* 5*d.* to 2*s.* 7*d.*, and one to 2*s.* 8*d.* per lb. To-day they have all advanced to the 2*s.* 8*d.* limit. We doubt whether it would be possible to buy at 2*s.* 5*d.* per lb. from the second-hand.

**CANTHARIDES.**—*Russian*, firm at the price last quoted. *Chinese* flies are reported to have changed hands lately at better prices, viz., 1*s.* 1*d.* per lb.

**CARDAMOMS.**—We understand that there have been a few sales since the last auctions of medium grade cardamoms at a slight decline on the prices paid at the sales.

**CASCARA SAGRADA.**—The market shows no alteration in value, and good thin bark offers at the rate of 60*s.* to 62*s.* 6*d.* per ewt. c.i.f. from the States, while thick bark may be had 5*s.* below that price. It is said that there is some anxiety among the holders at the absence of the expected boom.

**CASCARILLA.**—We have received a consignment of about 15 tons *via* Holland since our last report.

**CHAMOMILES**—A better demand is reported for this article, which has been neglected for some time. Good Belgian flowers are quoted at 37*s.* 6*d.* to 39*s.* per cwt.

**CINCHONA**—Among other arrivals this week we notice a particularly large consignment of bark direct from Java: it consists of 689 packages per *Merkara*, which we believe is one of the largest consignments ever received direct from Java. The public auctions on Tuesday comprised the following quantities:—

		Packages	Packages
Oceyan bark .. ..	760 of which	566 were sold	
East Indian bark .. ..	1,219 "	750 "	
Java bark .. ..	228 "	203 "	
South American bark .. ..	1,163 "	33 "	
<b>Total .. ..</b>	<b>3,375</b>	<b>1,557</b>	<b>"</b>

The bulk of the auctions as regards actual value, and

rather more than one third of the number of packages offered, again consisted of East Indian barks. *Succirubra* barks were particularly well represented, and of this class there was a fair choice of chips and shavings of fine appearance. About half of the American barks consisted of old *Cuprea* and soft Colombian bark which has been offered countless times before. The auctions were characterised by a somewhat dull tone, partly caused by the knowledge that a very heavy quantity of Java bark is about to be offered for sale in Amsterdam. There was only a moderate competition, and a large proportion of the supply was bought in, as the limits could not be realised. A slight fall of about 5 per cent. in the unit value on bark of average richness was established, and the unit may now be placed at 1 $\frac{1}{2}$ d. to 1 $\frac{3}{4}$ d. per lb.

The following particulars indicate the unit value realised by a few parcels:—

	Percent. equiva- lent of quinine sulphate	Price per lb.
3,900 lbs. East Indian <i>officinalis</i> , original chips	1.93	3d. to 3 $\frac{1}{2}$ d.
3,420 " " <i>succirubra</i> , renewed "	2.21	3 $\frac{1}{2}$ d. to 4d.
980 " " <i>officinalis</i> , original "	1.93	4d.
7,080 " Ceylon " renewed "	3.91	6 $\frac{1}{2}$ d. to 7d.
1,210 " " orig. shavings	3.57	7d.
4,700 " " <i>succirubra</i> "	1.73	2 $\frac{1}{2}$ d.
7,230 " " renewed "	1.57	2 $\frac{1}{2}$ d.
5,630 " " chips	2.41	4d.
9,610 " Java ledger, original "	3.16	5 $\frac{1}{2}$ d. to 6d.
13,000 " Ceylon <i>succirubra</i> , original shavings	1.38	3d. refuse
20,820 " " renewed "	3.15	5 $\frac{1}{2}$ d. "
1,150 " East Indian ledger, original chips	6.32	10 $\frac{1}{2}$ d. "

The following are the approximate quantities purchased by the principal buyers:—

	Lhs.
Agents for the Mannheim and Amsterdam works ..	73,601
" the Auerbach factory ..	70,769
" the Frankfort o.M. and Stuttgart works ..	64,049
" the American, French, and Italian works ..	54,146
" the Brunswick factory ..	42,814
Messrs. Howards & Sons ..	23,293
Mr. Thos. Whiffen ..	12,420
Sundry druggists ..	17,080
Total quantity sold ..	383,175
Bought in or withdrawn ..	275,831
Total amount of bark catalogued ..	639,036

It should be well understood that the mere weight of bark purchased affords no guide whatever to the quinine yield represented by it, firms who buy a small quantity of bark by weight frequently taking the richest lots, and *vice versa*. An analysis of the catalogues gives the following prices for sound bark:—

**CEYLON BARK.**—*Original*—Red varieties: Small and weak chips, 2d. to 2 $\frac{1}{2}$ d.; fair bright and bold mixed with broken quill, 3d. to 5 $\frac{1}{2}$ d.; good bright chips and shavings mixed, 2 $\frac{1}{2}$ d. to 4 $\frac{1}{2}$ d.; fair branchy stem chips and shavings, 3d. to 3 $\frac{1}{2}$ d.; several parcels of more or less dusty to bold root, 2 $\frac{1}{2}$ d. to 4 $\frac{1}{2}$ d. per lb. Yellow varieties: Dull and dusty stem chips, 3 $\frac{1}{2}$ d.; fine strong quilly chips, 7d.; good spoke shavings, 5d.; good rich root, 8d. to 10d. per lb. Grey varieties: Fair spoke shavings, 3 $\frac{1}{2}$ d. to 4d.; fine bright quilly ditto, 7d.; fair branchy chips, 3d. to 5 $\frac{1}{2}$ d. per lb. Hybrid: dull, weak branch chips, 2 $\frac{1}{2}$ d.; fine ditto, 8d. per lb. *Renewed*—Red varieties: Dusty siftings and weak chips, 4d.; fair stem chips, 4d. to 4 $\frac{1}{2}$ d.; good strong quilly chips, 7 $\frac{1}{2}$ d.; dull shavings mixed with chips, 2 $\frac{1}{2}$ d.; good but dusty spoke shavings, 6d. to 7d. per lb. Yellow varieties: Small and dusty chips, 9 $\frac{1}{2}$ d.; fine bold chips, 11 $\frac{1}{2}$ d. to 12d. per lb. (the highest price paid for any parcel in sale); bold grey chips, 4 $\frac{1}{2}$ d.; fair to good ditto spoke shavings, 3 $\frac{1}{2}$ d. to 7d. per lb.

**EAST INDIAN BARK.**—*Original*—Red varieties: A large quantity of chips, fair dusty to good bold quilly mixed, 2 $\frac{1}{2}$ d. to 4d.; chips and shavings of good appearance mixed with silvery quilly pieces, 3 $\frac{1}{2}$ d. to 4d.; dull to fine bright quilly shavings, 2d. to 4d.; fine bold quilly shavings, 7d. per lb. Yellow varieties: Small weak twigs, 3 $\frac{1}{2}$ d.; bright but very woody chips, 3d. to 5 $\frac{1}{2}$ d.; fine bold quilly chips, 8d. to 8 $\frac{1}{2}$ d.; weak to good branchy shavings, 4d. to 6 $\frac{1}{2}$ d.; dull and weak quills, 5 $\frac{1}{2}$ d.; root, 9d. per lb. Grey varieties: Fair branchy

chips, 3d. to 4 $\frac{1}{2}$ d.; dark and very small shavings, 2d. to 2 $\frac{1}{2}$ d.; fair to good quilly shavings, 2 $\frac{1}{2}$ d. to 6 $\frac{1}{2}$ d.; dull and dusty root, 6d. to 7d. per lb. *Renewed*—Red varieties: A large quantity of dull to good bright quilly branch and stem chips, 2 $\frac{1}{2}$ d. to 5d.; fine bold stem chips, 5 $\frac{1}{2}$ d. to 6 $\frac{1}{2}$ d.; dark to bright branchy shavings, 4d. to 6 $\frac{1}{2}$ d.; fine but dusty stem chips, 6d. to 6 $\frac{1}{2}$ d. Grey: Dull small to branchy chips, 5d. to 6d.; fair small shavings, 5d. per lb.

**JAVA BARK.**—*Original*: Ledger, small but rich chips, 5 $\frac{1}{2}$ d. to 9 $\frac{1}{2}$ d.; common to fair but dusty root, 4 $\frac{1}{2}$ d. to 6d. *Renewed*: Weak Ledger chips, 4d. to 5 $\frac{1}{2}$ d. per lb.

**SOUTH AMERICAN BARK.**—Only 33 packages (= 3,510 lbs.) of cultivated Bolivian *Calisaya* bark were sold, at from 6d. to 7d. for weak and very broken, and 9 $\frac{1}{2}$ d. to 10 $\frac{1}{2}$ d. for good fairly bold druggists' quilts. For 70 bales of old *Soft Colombian* bark 3 $\frac{1}{2}$ d. is required, while 515 packages *Cuprea*, of old import, were also bought in, several offers of 2d. to 3 $\frac{1}{2}$ d. per lb. being refused.

The exports of cinchona from Ceylon during the first half of the season (October 1 to February 28) have been as follows:—1889-90, 3,453,000 lbs.; 1888-89, 5,141,711 lbs.; 1887-8, 3,788,388 lbs.; 1886-7, 6,524,972 lbs.; 1885-6, 6,019,829 lbs. The arrivals by rail at Colombo during the same period were only 920 tons in 1889-90, as against 1,885 tons in 1888-9. Our imports of cinchona since the last report have been 2,513 packages from all quarters.

**CLOVES**—A report issued by a well-known Rotterdam firm on the position of cloves has attracted some attention during the week. The following are the salient features:—“Zanzibar reports, under date February 2 last, state that the total crop this season is by far the largest on record, and is estimated at 800,000 *frazileh*, or about the double yield of former abundant crops. A *frazileh* is equal to 35 lbs., and the total yield, therefore, will be about 28,000,000 lbs., while the average requirements of the whole world are estimated at only just over 11,000,000 lbs. Prior to 1871 the price of fair Zanzibar cloves in London averaged from 3 $\frac{1}{2}$ d. to 3 $\frac{3}{4}$ d. per lb., and, although since then an export duty of 15 per cent. of the value has been established, the difference between the prices mentioned and the actual quotation of, say, 4 $\frac{1}{4}$ d. to 4 $\frac{1}{2}$ d. is much larger. The large yield is undoubtedly a consequence of the replanting which has been going on in Zanzibar after the hurricane in 1872, the trees having now attained their full growth. The fact that the tree bears fruit every second year only leads to the supposition that the next crop will be a small one, but it is said that a much larger number of trees has been planted since the hurricane than ever existed before. At any rate, the current crop is much in excess of the requirements, and concurrently with this exceptional Zanzibar crop the yield of cloves in the island of Amboina (Netherlands Indies), though of much less importance commercially than Zanzibar, has also been greatly in excess of the average.” In reply to these alarming statements, it is said that no European house can possibly have any means of correctly estimating the crop of Zanzibar cloves, as the bulk of this article is produced on the small island of Pemba, north of Zanzibar, which is entirely in the hands of the natives, who do not allow any foreign traders to obtain accurate news of the crop; but the estimate given by the Dutch firm is thought to be much exaggerated. Meanwhile it is a fact that our market continues to decline, and Zanzibar cloves on the spot have fallen from 4 $\frac{1}{2}$ d. to 4 $\frac{1}{4}$ d. per lb., and for arrival from 4 $\frac{7}{10}$ d. to 4 $\frac{5}{10}$ d. To-day, however, sales for April-May shipment are reported at 4 $\frac{1}{2}$ d. c.i.f.

**COCA LEAVES.**—The recent heavy arrivals in New York are being absorbed satisfactorily by consumers, and the news of an advance in South America has stimulated the market. The quotations are 1s. 1d. to 1s. 2d. per lb. c.i.f. for dark green *Huanoco*, and 9d. to 10d. c.i.f. for light *Truxillo* leaves. *Cocaine* is also quoted somewhat higher.

**COPPER (SULPHATE).**—Lower, and obtainable at 25s. 6d. on the spot. For forward delivery June-July 22s. would be accepted. At the same time purchasers complain that they cannot get delivery for what they have bought at present.

**CREAM OF TARTAR.**—In strong demand, and much dearer. Best white crystals, 108s. nearest price; powder, 110s. 6d. For forward delivery full prices are also asked.

**CUTCH.**—The market is very firm and there is an excellent

inquiry both in London and Liverpool, especially for the better brands. *Star B.* has been in particularly good request with considerable business at 31s. on the spot, and 31s. to 31s. 6d. for delivery. *Eagle* brand has been sold at 30s. for March-April. The stock of common qualities is large, and these are very neglected.

DAMIANA LEAVES are now being offered at 6d. to 6½d. per lb. c.i.f. from New York for best green quality. They have never been so cheap before.

ERGOT OF RYE.—Firm. We hear that some Russian ergot has been sold at 1s. 2d. per lb. c.i.f. for a parcel now due.

GALLS.—*Chinese galls* very quiet, spot price is nominal at 72s. 6d. to 74s. for usual shape and quality, and 69s. for plum-shaped galls; *Turkey galls* are also quiet, with a slight business in good blues at 57s. 6d. to 60s. per cwt.

GAMBIER.—A small business is reported on the spot at 27s., which shows a slightly easier market. March-April has been done at 27s., and January-February at 27s. 3d.

GLYCERINE.—The makers have now all fixed their price at 70s. for double distilled German 1250. There is very little offering in the second-hand below this price.

GOLDEN SEAL Root is being pressed for sale in America, and is finding buyers at the reduced rates of 1s. 3d. to 1s. 4d. c.i.f.

GUM ANIMI.—*Zanzibar* sold at some slight advance on the last auctions, but not any dearer than has recently been done privately, ordinary red to fair pale amher sorts, 9l. 15s. to 11l. 10s., common to good pale bean and pea, 95s. to 127s. 6d., red pickings, 62s. 6d. to 72s. 6d. There were also small sales of *Madagascar animi*, roughish red to ordinary pale sorts, 135s. to 117s. 6d. per cwt.

GUM ARABIC.—We do not hear of any transactions worth mentioning this week.

GUM COPAL.—Dull of sale, dark to good pinky Manilla, 33s. 6d. to 50s.

GUM DAMAR.—Nearly all bought in, with small sales of fine *Singapore*, at 57s. 6d.

GUM KOWRIE.—The small supply of 846 cases offered at auction to-day met with a good demand, and about two-thirds were sold at firm prices, common rough to soft, 29s. to 35s.; fair to good hard, partly scraped, 52s. to 67s.; brown and amher, 72s. to 84s.; good amber, up to 5l 2s. 6d.; fine to superior selected pale, 7l. to 12l. 2s. 6d.; common dark to fine chips, 29s. to 68s.; dust, 16s. 6d. to 39s. 6d.

GUM THUS.—The news from New York is of lower prices, as the new crop has come to hand in quantity. The next crop will not be gathered until late in the year. The quotation for good soft white quality is 12s. 6d. per cwt. c.i.f.

GUM TRAGACANTH.—For the public auctions to be held to-morrow 1,394 packages have been declared, of which 384 packages are hog gum.

HONEY.—The demand for medium and good honeys remains very brisk, and full prices are readily paid. Californian honey is offered at 40s. to 45s. c.i.f. for amber, and 46s. 6d. for pale clear.

INDIGO.—For the next periodical auctions of East Indian indigo, which will commence on April 14, 9,750 chests have been declared already.

INSECT FLOWERS.—Considerable transactions are reported from Trieste. It is said that some American buyers have given their orders now. The prices are still low, but there is every indication that they will rise further. Open flowers have already advanced about 10s. per cwt., and the quotations now are: Open flowers, 85s. c.i.f.; half-closed, 95s. c.i.f.; and closed flowers, 110s. c.i.f.

IODINE and its salts unchanged and nominal.

JALAP.—There is very little offering here, but for fair quality up to 1s. per lb. is asked, though we do not think that price will be obtainable just yet. Reports from Hamburg to-day come dearer, and from America the news is that the new crop is likely to be much below the average in quantity. The new jalap is now arriving from Mexico, and prices are well maintained. The quality is not said to be

very good, and the quotation is 10½d. to 11d. for sound *Vera Cruz*.

MARSHMALLOW Root.—The prices on the Continent are advancing daily, the small crop having been almost all disposed of.

MUSK.—It is reported that some 3 or 4 caddies of first pile *Tonquin* pods, thin blue skin, &c., ex last sale, have since found buyers at 85s., a price which was not obtainable at the auctions.

NUX VOMICA.—Three shipments, together 462 packages, have come to hand since our last report. The last price which we have heard mentioned here for good silky seed is 11s. 6d. per cwt.

OIL (CASTOR).—There is no change in London. In Liverpool the market is rather firmer, and small sales have been made of good Calcutta seconds at 3½d. per lb. For arrival there is but little offering. Calcutta reports, dated February 18, state that the market is firmer, and slightly higher for both oil and seed. The stock and arrivals of the latter remain exceedingly limited, and the production of oil is not sufficient even for the local requirements.

OIL (COD-LIVER).—The favourable reports from Norway continue, but notwithstanding this prices are said to be tending a little higher, 62s. c.i.f. being asked for fine non-freezing new. Our stocks of old oil are said to be rapidly clearing off, large quantities being sold to soap-makers, and for other industrial purposes.

OILS (ESSENTIAL).—*Star anise* quiet at 6s. 1½d. to 6s. 2d. per lb. Some oil of very fine quality, exported direct from Tonquin by the French contractor who has secured the monopoly of the production, is now being offered at a slightly higher price than the Chinese oil. *Cassia* oil quiet at 3s. 6d. to 3s. 7d. per lb. The *Camphor* oil which was bought in at the last auctions is said to be held at 9d. per lb. *Citronella* quiet at 3d. per oz. for tins or bottles. Oil of *Cloves* is quoted at from 3s. to 3s. 6d. per lb. for English distilled, according to quality. *Menthol* is arriving in rather heavy quantities, and prices must be pronounced somewhat easier. There are several sellers at 7s. 6d. per lb. spot terms, for fair quality crystals, but the trade are holding off in expectation of lower rates. American *Peppermint* oil (HGH) dull at 11s. per lb. American reports speak of a pretty strong buying by speculators, but prices have not advanced. *Lemongrass* oil rules steady at 1½d. to 1¾d. per oz. Italian oils quiet. *Bergamot*, however, keeps up well in price, although it usually declines at this period of the year, when the demand has been mostly satisfied. *Otto of Rose* firm and in good demand. *Spearmint* oil is reported somewhat easier from New York, at 7s. per lb. c.i.f. The *Violet* pomade is now being prepared in France, and the *Jasmine* will soon be taken in hand.

OILS (VARIOUS).—*Cocoanut* oil again firmer, Ceylon in pipes on the spot, 24s. 9d. to 25s.; c.i.f. terms, 24s.; Cochin, 27s.; and sales of fine quality at 28s.; for arrival 27s. is also asked. Mauritius in hogsheads, 25s. *Cotton-seed* oil quiet; crude, 19s. 9d.; refined, 22s. 3d. to 22s. 6d. *Linseed* oil is advancing, and closes at 23s. 3d. to 23s. 6d. on the spot; Hull also dearer, spot 22s. 4½d. to 22s. 6d. naked. *Palm* oil, fine Lagos, 24s. 6d. *Petroleum* quiet, American, 5½d. to 5¾d.; Russian, 5¾d. to 5½d. *Rape* oil has a declining tendency, brown, 31s. 9d.; refined, 33s. 6d. *Tarantine* dearer, American spirits, 30s. to 30s. 3d. on the spot. *Olive* oil, 42s. to 43s. for Spanish and Messina; Mogadore is worth 38s.

ORRIS Root.—Higher prices are again quoted from Italy, best *Florentine* being now quoted at 70s., and second quality at 60s. per cwt. in Leghorn; while for *Verona* orris from 32s. to 37s. 6d. per cwt. is asked.

PHENACETIN is being continually lowered in price through the competition of the manufacturers.

POTASH SALTS.—*Chlorate* has been advanced to 5d. on the spot, under which nothing can be bought. For forward delivery 5½d. to 5¾d. is asked. *Bichromate* quiet at 4d. *Yellow prussiate*: 9½d. for both English and foreign. *Salt-petre*: German refined, 18s. 6d. to 19s. on the spot; English, 21s.

POTASSIUM BROMIDE.—There are offers of this article from America at 1s. 5d. per lb. for lots of 20 cwt.

QUICKSILVER has been fairly steady this week; the importers quote 9l. 5s., and second-hand holders 9l. 3s. 6d. to 9l. 4s.; *Italian quicksilver*, which has lately been arriving in pretty considerable quantities, being offered at a fraction below the rate.

QUININE.—Only a few transactions are reported this week, and those have been of lower prices, one lot of second-hand German having said to have sold at 1s. 1½d. for net cash on the spot, but we do not know whether this is an authentic sale. On the same day another parcel changed hands at 1s. 2d. The makers are nearly all much above these prices—*Howard's* brand 1s. 6d. for vials, and 1s. 8d. for bottles; *B. & S.* and *Brunswick*, 1s. 5d. for bulk; *Italian*, 1s. 3d. to 1s. 3½d. for bulk.

SAFFRON continues to advance, and 51s. 6d. to 52s. is quoted for fine Valencia.

SARSAPARILLA.—There has been a strong demand for *Mexican*, and very little of it is now left in New York, while the primary markets are also said to be bare. *Vera Cruz* is offering at 3½d. to 4½d. c.i.f., and *Honduras* is also in better inquiry, at 1s. 3d. to 1s. 9d. c.i.f., according to brand.

SENEGA.—There has been a good Continental demand in the New York market, and the cheap lots are reported to be cleared off. The price now is 1s. 7½d. to 1s. 8d. (c.i.f.). The new crop is expected to arrive in about two months.

SERPENTARIA.—An upward movement is reported from America, where the home trade has been buying freely. The new crop is due in about two months.

SHELLAC.—The demand for spot parcels for consumption is fairly active, and there have been several small transactions during the week under review, but for delivery the market shows very little animation indeed. At the auctions the following quantities passed under the hammer:—

	Cases	Cases
Orange lac .. ..	540	of which 230 were sold
Garnet .. ..	117	" 117 "
Button .. ..	103	" 13 "
	750	260

Second *Orange* parcels were held at prices above the current market rules by the owners, but fine orange sold at 2s. to 3s. below valuation, while the *Button* sold realised firm prices, and *Garnet* advanced about 1s. per cwt. all round, selling at 71s. for free unworked, and 67s. to 68s. for cakey worked. We also hear of some small sales of *Fine orange lac*, *ASSL* brand, on the spot, at 104s. per cwt. Business at the call has been principally in TN for May delivery, at 77s., and July at 78s. per cwt., and to-day the market is slightly easier, the following being the quotations:—

	Mar.	Apr.	May	June	July
Orange TN, sellers .. ..	75.6	76/	78/	77/	77/6
" buyers .. ..	74/6	74.6	75.6	76/	77/
Garnet AC, sellers .. ..	73/	73/6	3.0	73/	73.
" buyers .. ..	70/	70/	72/6	72/	72/

SILVER.—The continued advance in the price of the metal is proportionately affecting the quotations for the nitrate.

SODA SALTS.—*Ash* at 1½d. to 1½d. per degree London, and 1½d. less 5 to 6 per cent. on the Tyne. *Bicarbonate*, firm at 6l. 5s. *Caustic*: the advance is well maintained with a strong demand; 60 to 70 per cent. white, 9l. 5s. to 10l. 5s.; *ercam*, 8l. 15s. to 9l.; *Crystals* quiet, London ex-ship, 55s. to 56s.; Tyne, 45s. 6d. to 46s. 6d. *Nitrate*, flat, and unchanged.

SOY.—Retail sales of *China* at 1s. 3d. per gallon.

SPERMACETI.—The American market has a stronger tendency, and it is thought that a movement towards much higher prices is not unlikely to occur shortly. The quotation still comes at 1s. to 1s. 0½d. for blocks, and 1s. 2d. for cakes, but there is very little to be had in the market.

SPICES.—*Arrowroot* dull of sale. *Bermuda* bought in at 1s. 10d. to 2s. *Cassia lignea* quiet, 22s. 6d. nearest price.

*Cassia buds*, 44s. to 46s. per cwt. *Ginger*: *Jamaica* rather easier, with sales of 107 packages new crop common lean to middling at 61s. to 77s. per cwt. *Mace* slightly easier. *Penang ordinary mouldy*, but red at 2s. 5d.; *West Indian* at 2s. 1d. to 2s. 5d. *Nutmegs* cheaper for larger sizes, but small bring full rates; *Singapore* (107), 2s. 7d. per lb. *Black pepper* flat and easier at the auctions: *Singapore*, 5½d. to 5½d.; good heavy *Malabar*, 6d. to 6½d. *White pepper* also lower, good *Siam*, 9½d.; fair *Penang*, 7½d. to 7½d.; *Singapore*, 10½d. for arrival, which is lower. *Pimento*, firm, medium quality 3d. to 3½d.

STICKLAC.—Firm, with small sales of good *Siam*, fairly free from wood, at 42s. 6d. per cwt.

TEA.—The *Congou* market is very steady to a trifle dearer, though trade generally is not very active. The quotation for common leaf tea is still 4d. to 4½d., but the quotations in the terminal market for the rather better grades dealt in by the Clearing House are higher for the week. The dearth of good medium tea, from 8d. to 1s., is becoming more and more marked, and finer grades are still being inquired for by exporters. *Souchongs* are still being forced off in large quantities, mostly on Chinese account, and some good teas were sold from 4½d. to 5d. on Tuesday. For anyone of a speculative turn of mind these *Souchongs* at present quotations should be interesting. *Newmakes* are steady, and fine *honeysuckle* sorts are wanted at firm prices. *Scented teas* are quiet without change. *Assams* are firm for all grades, and there is a pretty general feeling that we are not likely to see the useful *Souchongs* and *Pekoe Souchongs*, which can now be bought from 7d. to 7½d., any cheaper. On the other hand we shall no doubt see lower quotations for worse tea, as the common leaf and broken which generally comes in at this time of the year is put on the market. *Ceylons* are firmer after the sudden fall of last week.

THYMOL.—We referred a few weeks ago to the advance in the price of this article. Messrs. Böhringer & Sons state that the employment of thymol in the manufacture of certain new preparations has suddenly caused such a large demand for this article that available lots have grown very scarce. The present quotation is from 12s. to 14s. per lb., but higher prices are anticipated.

TONQUIN BEANS.—The New York market remains exceedingly firm, and *Angosturas* are not obtainable under 6s. 3d. c.i.f. terms, from the second hand, some holders asking 3d. more. The market is practically clear of *Pará* beans, though some odd lots might perhaps be secured at 5s. c.i.f.

TURMERIC.—Fairly large transactions at firm prices are reported during the week. *Bengal*: at 10s. 3d. to 10s. 6d. *Madras*: fair hard yellow finger up to 14s., which shows an advance of about 6d.

WAX.—*Becs'wax* is reported in good demand, with sales at a slight advance over the auction prices. *Japan wax* neglected at 45s. to 46s. per cwt. for good pale squares.

#### THE GERMAN MARKETS.

HAMBURG, March 11.

THEIR is a little more activity in our drug market, and many prices show a slight advance, the following being the principal matters of interest:—*Agar-Agar*, 190m.; *Balsam copaiba*, Bahia, firm at 525m.; *Balsam of Peru*, 825m. to 840m. *Camphor* again dearer at 550m. for prompt and forward delivery. *Cantharides* in demand at 7.75m. to 8m. for good *Russian*. *Condurango* has arrived in large quantities, and is now quoted at 140m. *China galls* lower, say 130m. *Cutch* improving; 56m. to 58m. for "Deer" brand. *Coca leaves*, Bolivian, 250m. *Insect powder*, prime Dalmatian, 200m. *Lycopodium*, 270m. *Ergot of rye*, best *Russian*, 246m. *Peppermint oil*, H.G.H., quiet at 10.30m. per lb.; *Japanese*, 920m. *Jalap* dearer, and good quality scarce. Seventeen serons have arrived, and the price to-day is 198m. *Dividivi* in good demand at 19m. to 33m. *Japan wax*, white, 86m. 5,000 cases have just arrived and caused somewhat lower prices for prompt delivery. *Carnauba wax*, yellow, 110m. to 115m. *Cloves* firmer at 91m. *Saltetre*

flat at 7.95m. Alcohol prices are improving, and the quotation is now 22.50m. Sarsaparilla, best quality Tampico, 84m. Worm seeds of ordinary quality 36m.; finest ditto, 46m.

### CHEMICALS IN THE NORTH OF ENGLAND.

THE chemical market continues very firm, with prices moving upwards for most articles. The American demand for *Caustic soda*, *Sulphate of soda*, and *Soda ash* continues very brisk. The threatened coal strike in the Midlands prevents Lancashire makers from quoting for forward business, and sales are therefore only for immediate wants. It is hoped that some arrangement will be made to prevent a strike, but otherwise the consequences must be disastrous to the chemical trade in Lancashire. It would also affect the makers on Tyneside, as most of the lime used in the manufacture of bleaching powder is drawn from Buxton and its neighbourhood.

**BICARBONATE OF SODA** continues scarce, but prices remain the same; 5*l.* 15*s.* per ton in 1-cwt. kegs, f.o.b. Liverpool, and 5*l.* 15*s.* per ton, f.o.b. Tyne, with usual allowance for large casks.

**BLEACHING POWDER** declined during the early part of the week, but has recovered itself within the last day or two; 5*l.* 5*s.* per ton on rails for softwood casks; and 5*l.* 12*s.* 6*d.* per ton, f.o.b. Liverpool, for hardwood casks; 5*l.* 5*s.* to 5*l.* 7*s.* 6*d.* f.o.r. Glasgow; 5*l.* 5*s.* for softwood, and 5*l.* 7*s.* 6*d.* for hardwood, f.o.r. or f.o.b. Tyne; 5*l.* 15*s.* per ton, ex ship Thames, with 20*s.* per ton extra for 1-cwt. kegs, 15*s.* for 1½-cwt. kegs, and 7*s.* 6*d.* for 3-cwt. casks.

**CAUSTIC SODA**.—Prices are again higher, with good demand. White, 60 per cent., 8*l.* 7*s.* 6*d.* to 8*l.* 10*s.* per ton; 70 per cent., 9*l.* 7*s.* 6*d.* to 9*l.* 10*s.*; 74 per cent., 10*l.* 5*s.* to 10*l.* 7*s.* 6*d.*, f.o.b. Liverpool. Cream, 7*l.* 15*s.* to 7*l.* 17*s.* 6*d.*, f.o.r. or 8*l.* to 8*l.* 2*s.* 6*d.* f.o.b. Liverpool. The Newcastle price has advanced to 10*l.* 5*s.* to 10*l.* 10*s.* per ton for 77 per cent., prompt delivery.

**CHLORATE OF POTASH** has been advanced to 5*d.* per lb. for early delivery, and 5½*d.* to 5¾*d.* for forward business delivered Glasgow, Liverpool, and Newcastle.

**HYPOSULPHITE OF SODA** remains unchanged, but there is a good inquiry for this article. Prices quoted—4*l.* 5*s.* per ton in 5 to 7-cwt. casks, and 4*l.* 15*s.* per ton in 1-cwt. kegs, f.o.b. Tyne.

**SODA ASH** continues in good demand. Liverpool *Caustic* and *Carbonated* 1½*d.* per degree; Newcastle, 48 to 52 per cent., 1½*d.* per degree, less 5 per cent.

**SODA CRYSTALS** are slightly easier at 2*l.* 17*s.* 6*d.* to 3*l.* per ton, f.o.b. Liverpool, in 3-cwt. casks, net weight. Newcastle lower at 45*s.* 6*d.* to 46*s.* per ton gross weight, f.o.b. Tyne, 52*s.* to 52*s.* 6*d.* ex ship Thames.

**SULPHATE OF COPPER** very firm for early shipment, 26*l.* to 26*l.* 10*s.* for present wants, with lower prices for later deliveries.

**SULPHATE OF SODA** unchanged in price. Prompt delivery 30*s.* to 32*s.* 6*d.*, f.o.r. Widnes or St. Helens, and 32*s.* 6*d.* f.o.r. or f.o.b. Tyne. Ground in casks 42*s.* 6*d.* per ton, f.o.b. Tyne.

AMERICAN PHARMACEUTICAL JOURNALS appear to be confused sometimes about the two principal pharmaceutical organisations in Great Britain. We are told by one that "Mr. Sidney Plowman, senior honorary secretary to the Pharmaceutical Society of Great Britain, has departed for Australia." It was the Pharmaceutical Conference which Mr. Plowman was at one time an honorary secretary of, but that was more than two years ago. The Pharmaceutical Society is the body which is empowered to grant certificates of competency to chemists and druggists; the Pharmaceutical Conference is, like the American Pharmaceutical Association, a body which meets once a year for social and scientific purposes. The former is the older and more abused body. We accept in advance the thanks of the *Western Druggist* for this information.

### LONDON DRUG STATISTICS.

THE following figures refer to the stocks of the principal drugs in the port of London on February 28, 1890, and to the imports and deliveries during the first two months of 1890, as compared with the preceding year:—

Article	Stocks		Imported		Delivered	
	1890	1889	1890	1889	1890	1889
<b>Aloes</b> ..os & pkgs	9,244	7,197	1,711	851	705	643
" ..gourds	1,300	2,062	63	172	107	158
<b>Anise, Star</b> ..chtes	71	142	—	40	—	37
<b>Arrowroot</b> ..cks	11,620	10,583	2,885	1,685	2,476	1,981
" bxs & tins	5,348	6,767	84	59	830	1,152
<b>Balsams</b> ..cks, &c.	2,243	396	116	—	151	24
<b>Bark (Cinchona),</b> S.American cases bls. &c.	454	505	—	5	8	6
E.I., Ceylon, and Java ..cks bls. &c.	30,183	34,307	1,531	900	3,434	658
<b>Borax</b> ..pkgs	25,539	24,764	9,116	11,773	7,853	7,825
<b>Calumba</b> .."	1,788	1,729	127	94	223	209
<b>Camphor</b> .."	863	336	2,162	—	1,332	591
<b>Cardamoms</b> ..chtes	1,561	961	766	569	530	195
<b>Cochineal</b> ..sns	5,339	4,814	1,573	515	637	664
<b>Coco. Ind.</b> bgs, &c.	138	315	—	—	34	34
<b>Cream of Tartar</b> cks	10	11	—	8	—	10
<b>Cubebes</b> ..bgs	201	50	—	—	108	74
<b>Dragon's Blood</b> chts	122	107	8	51	30	24
<b>Galla, China, &amp;c.</b> os	2,055	1,571	1,493	167	408	721
<b>Turkey, &amp;c.</b> sks	3,111	3,056	526	1,642	1,152	1,303
<b>Gums</b> —						
<b>Ammonia</b> pkgs	77	121	1	6	15	10
<b>Animi &amp; Copal</b> pkgs	8,190	4,811	1,563	1,339	2,925	1,343
<b>Arabic</b> .."	20,966	23,043	4,538	8,180	5,487	4,580
<b>Asafoetida</b> .."	3/1	266	—	3	40	86
<b>Benzoin</b> .."	2,241	2,160	688	545	534	372
<b>Damar</b> .."	5,174	2,755	1,123	1,181	1,143	947
<b>Galbanum</b> .."	50	24	—	—	8	—
<b>Gamboge</b> .."	51	105	28	29	40	17
<b>Gnaiseum</b> .."	18	12	—	—	1	4
<b>Kino</b> .."	78	92	—	6	39	1
<b>Kowrie</b> ..tns	1,373	1,463	421	699	297	611
<b>Mastio</b> ..pkgs	24	46	—	19	3	4
<b>Myrrh</b> .."	388	520	22	118	82	94
<b>Olibanum</b> .."	5,010	3,778	1,954	2,054	683	1,001
<b>Sandarao</b> .."	602	745	422	214	204	218
<b>Tragacanth</b> .."	6,931	6,971	586	1,911	1,033	1,576
<b>Indigo, E.I.</b> ..chtes	11,180	10,586	5,703	4,894	3,993	3,345
<b>Ipecac.</b> ..cks & bgs	2,853	4,294	1,911	2,971	608	696
<b>Spanish Bals.</b> .."	156	61	238	125	264	92
<b>Jalap</b> ..bls	82	74	12	—	1	13
<b>Lao Dye</b> ..chtes	5,626	5,854	—	—	3	26
<b>Nux Vomica</b> pkgs	334	1,051	162	16	295	91
<b>Oils</b> —						
<b>Anise</b> ..os	63	98	63	111	73	21
<b>Cassia</b> .."	87	52	120	65	61	29
<b>Castor</b> ..cks	411	556	218	67	222	87
" ..os	4,132	5,028	1,695	369	779	2,349
<b>Cocoa-nut</b> ..sns	2,344	1,494	412	701	685	697
<b>Olive</b> ..eks, &c.	1,105	665	1,187	582	871	287
<b>Palm</b> ..tns	28	32	21	21	12	51
<b>Opium</b> ..chtes, &c.	—	1,634	—	170	—	153
<b>Rhnbarb.</b> ..chtes	775	1,020	167	235	241	238
<b>Safflower</b> ..bls, &c.	419	572	30	—	64	18
<b>Nit. of Potash</b> tns	414	666	978	657	1,744	585
" Soda .."	2,441	4,083	3,376	3,438	1,977	1,363
<b>Sarsaparilla</b> ..hls	33	331	143	231	188	286
<b>Senna</b> .. bls, &c.	3,762	1,725	1,614	446	1,007	612
<b>Shellac, Orange</b> chtes, &c.	37,870	44,534	2,941	3,517	5,901	5,569
<b>Garnet</b> .."	7,190	14,138	—	—	2,702	1,071
<b>Button</b> .."	5,861	6,284	1,281	624	1,180	2,147
<b>Total</b> ..chtes, &c.	50,921	64,956	4,222	4,241	10,183	8,787
<b>Stickinc.</b> ..chtes, &c.	2,811	3,851	—	427	265	403
<b>Gamhier</b> ..tns	1,168	1,322	1,703	1,691	1,232	1,526
<b>Cutch</b> .."	2,388	3,670	51	1,013	240	601
<b>Turmeric</b> .."	2,408	3,222	—	101	144	106
<b>Vermillion</b> , chtes, &c.	19	33	28	57	28	31
<b>Wax, bees</b> ..hls & c.	362	501	56	83	458	113
" oks & os	938	1,335	304	726	295	619
" oakes	23	17	—	—	—	—
" Japan ..pkgs	1,557	1,120	26	1	114	231

A SUPERIOR BLACK INK, which is not affected by water or acids, is made by mixing warm solutions of potassium bichromate and gelatine, exposing to sunlight for half an hour, adding a solution of nigrosin in water, filtering, and finally adding a few drops of creosote.



### Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries, &c. will be attended to in the order received.

### Reform of the Pharmaceutical Society.

SIR,—Whilst many earnest reformers amongst us will regret the premature abandonment of the Pharmacy Acts Amendment Bill, which we were disposed to accept with some modifications, for the good it contained, and as a first instalment of necessary reforms, yet its hasty withdrawal at the first blast of opposition shows plainly how hopeless it is to expect anything really progressive from the present half-hearted, unrepresentative Council, who neither possess the will, the courage, nor, it must be added, the support, necessary to fight an uphill battle on behalf of the trade.

Let us for a moment analyse facts and figures, with the view of finding out some of the reasons for their impotence in this respect in the past, and to suggest a more excellent way of proceeding in the future.

The total strength of the Council electorate is 3,501; but, as one half of these did not vote at the last election, and another half, to put it mildly, have no confidence in their representatives, although for many years past they have not had much chance of changing them, it follows as a result that the present Council is really elected by only some 1,000 (principally London) voters, yet imagine that they reflect the opinions of, and now vainly endeavour to provide the necessary legislative measures for, the 14,500 chemists and druggists of the United Kingdom.

Is not this a strange anachronism, and one that should have the closest attention of every voter? Can it be possible that a council, constituted in this way, could possess the necessary elements for passing any opposed Bill, much less any measure which might seriously threaten the vested interests of grocers, oilmen, and stores? We say it is not. Therefore, would it not be the wisest and best policy to promote, in the first place, a practically unopposed measure for the unification of titles, enlargement and consolidation of the Society, for sweeping away all pettifogging restrictions to the free entry of all elected members into the Council, and for the reduction of the subscription to 10s., in order to strengthen and consolidate the Society?

Set your own house in order, oh ye slow-coach councillors! When this is accomplished, the combination and co-operation of the trade, secured by the admission into the Society of a clear majority of the whole body, say a membership of eight to ten thousand of the cream of the trade, would not the power and ability of the Council for legislative purposes be immensely increased, and could we not look forward with tolerable confidence to the passing of a Bill at no distant date, "to restrict the dispensing, compounding, and vending of all medicines to the qualified chemist," or, as your correspondent "Viator" puts it, "An Act of Parliament to render it penal for any person except a registered chemist to sell any kind of drug or medicine whatsoever, or any proprietary article put up for medicinal purposes"?

We call upon every member of the Society and of the trade to combine together to attain this desirable result, which is our perfectly equitable, legitimate, and just right, both expedient on behalf of the public safety and in agreement with the universal custom amongst the Continental nations.

I am, sir, yours faithfully,

Cardiff.

ALFRED COLEMAN.

J. D., Ph. Ch. (6/52), says the best thing to do, and the best way to do it, is:—(1) To unite the trade by drafting a Pharmacy Act, the object of which shall be that the preparation, dispensing, and vending of all medicines be confined to efficiently trained, examined, and certificated pharmacists. The trade would go for this as one man. (2) A copy of the Bill to be forwarded to a leading pharmacist in every town or district, and a petition setting forth the just claims of the trade and the urgent necessity for protecting the public against the dangers arising from the vending of patent medicines by unqualified and incompetent persons, to be sent to every member of the craft. He endeavours to procure the signatures of all the men (and women) of light and leading in his district. Petitions thus signed to be presented to the parliamentary representatives, and every effort made to obtain their support. Until a determined, bold, and united effort be made on the lines I have indicated, I respectfully assert that all has not been done that ought, could, and should have been attempted, by a body of educated and ill-requited, responsible, and deserving servants of the public. For more than twenty-five years I have taken a deep interest in pharmaceutical politics. I am a "working-man" member of the craft, and sincerely and intensely desire that every member should at once join the ranks of the pharmaceutical reformers, and by giving their hearty, generous, and enthusiastic support to leading men, willing to urge forward an amended Pharmacy Act (framed for the protection of their interests, on the lines I have roughly described), prove that they are in hearty sympathy with the forward party. The one thing needful is to organise, organise, organise!

### The North of England Pharmaceutical Association.

SIR,—I extremely regret if I have in any way offended our fellow-tradesmen by not affixing my signature to the queries published under the above heading in your issue of March 1. I deemed it advisable not to publish my name, not wishing anyone to think I was biased against the president of the North of England branch. But, knowing that Newcastle possesses a museum and library second to none in the provinces, with every facility for keeping juniors and apprentices together, and fitting them to take their stand by the side of the greatest pharmacists of the country, it pains me, as a chemist, to see such an institution lying useless.

If Mr. Martin cannot reply to my letter as it is, I must leave the subject for others to pursue, and subscribe myself again

Yours, &c.,

A NEWCASTLE CHEMIST.

### Lectures for Pharmacists.

SIR,—Although unsuccessful in obtaining a "place" for my sketch of a lecture on coal-tar, I cannot refrain from thanking you for the valuable service you have rendered young pharmacists in general, and myself in particular, for the valuable suggestions that have been evolved by the January post-card competition.

I think it is of the utmost importance for chemists to come before the public at favourable opportunities to evince to them that their education fits them for the important positions they hold, and that they are not merely salesmen of goods that they know little or nothing about. Besides, it gives a stimulus to study and investigation to prepare for a lecture on subjects with which otherwise one might be content with a mere superficial knowledge.

Yours faithfully,

R. L. E. (1/61.)

March 4.

### Dressing Skins.

SIR,—Some time since a correspondent in THE CHEMIST AND DRUGGIST asked if anyone could suggest some means of softening skins cured with alum. I have as yet seen no reply. Some little time since a friend asked my advice with regard to a deer skin which was used as a carriage rug. It had evidently been cured with alum, and had become infested with the larvae of some insects, which were rapidly destroying it. I advised that it should be steeped in a very

weak solution of corrosive sublimate, and supplied a rather large quantity of ammon. chlor. to dissolve it. On inquiry about it some little while afterwards I was informed it answered very well indeed, and also had a remarkable effect on the skin, which previously had been hard as a board, but had now become quite soft and pliable.

A few weeks since a captain of a yacht asked me if I could recommend him any thing to soften some skins cured with alum, as they were so hard as to be almost useless. Amongst them were some bird skins. I recommended him to wash the skins inside with a solution of sal ammoniac. He tried it on the bird skins first, and informed me it rendered them as soft and pliable as silk. In another case it had the same effect.

I thought perhaps the above information might be of service to others.

Yours truly,

X. Y. Z. (1/19.)

#### Tincturo of Kino.

SIR.—In July, 1887, I made a batch of tinct. kino, strictly B.P.; about half of it has been sent out, the remainder has gone into a jelly. I shall be pleased if you can tell me the reason of it doing so. I understood when the new formula was introduced the object of the alteration was to prevent any gelatinisation. I may say that I have made the tincture many times according to the old form, that is with S.V. rect. only, but never had any difficulty with it.

Yours respectfully,  
J. P. (256/30.)

[We have always regarded the addition of glycerine as an effectual preventive of gelatinisation, and this opinion is shared by most of those who have paid attention to the subject. It is possible that our correspondent has been working with a kino which is not obtained from the official source. This is a point which might be inquired into; but, apart from that, the subject is one upon which a general expression of opinion from our readers is desirable.—ED. C. & D.]

#### DISPENSING NOTES.

*The opinions of practical readers are invited on subjects discussed under this heading.*

#### A Bismuth Mixture.

1/51. H. S. F. Brown asks how the precipitate is formed in the following mixture:—

Pot. iod.	..	..	..	..	..	gr. iiij.
Tr. beliad.	..	..	..	..	..	iiij.
Mist. bismuth. sed.	..	..	..	..	..	3ss.

Ter die.

The formula for Mist. Bismuth. Sed. is:—

Bismuth. subnit.	..	..	..	..	..	gr. x.
Sodii bicarb.	..	..	..	..	..	" x.
Pulv. trag. co.	..	..	..	..	..	" x.
Aquaæ ad	..	..	..	..	..	1oz.

The patient had the mixture two weeks running and it was nearly white. The third week she brought it back, and by this time it had a heavy brick-red precipitate in it. [The precipitate is bismuth oxyiodide, the formation of which, by interaction of potassium iodide and bismuth subcarbonate, cannot be prevented, but in this case has been delayed owing to the presence of the mucilaginous substances. It is a proved fact that mucilage delays chemical action. This is as good an example of the fact as we have come across lately.]

#### An Explosion.

SIR.—On making up an ointment yesterday, consisting of 20 grs. of thymol to 1 oz. of vaseline (Chesebrough), I powdered the thymol in a glass mortar, and added a few drops of S.V.R. for the purpose of dissolving it, and triturated them together, when immediately an explosion occurred, completely shattering the mortar. Have you or any of your

numerous readers met with a similar experience, or can they explain the cause? I may add that I have made it up the same way repeatedly before without meeting with any accident.

Yours truly,  
SCOTONIAN. (7/23.)

[This is a way the glass mortar has. We published accounts of similar incidents two or three years ago. Have any of the correspondents of that time any new theories to advance?—ED.]

#### Morphine Oleate.

1/53. Bunsen has had the following to dispense:—

Hydrarg. oleat.	..	..	..	..	..	3ss.
Morph. oleat.	..	..	..	..	..	3j.

M. Ft. applic. pro genu.

"Bunsen" asks how to dispense this correctly. What strength is the morphine oleate, and of what consistence should the finished product be?

[We should say that the prescriber is unfamiliar with the oleates. As explained in "The Art of Dispensing," page 116, "Oleates of mercury and morphine contain 1 grain of alkaloid, irrespective of the mercurial strength." In this case the 10-per-cent. oleate, which is official, should be supplied, but it would be advantageous to consult the prescriber regarding the morphine strength which he desires. He apparently means the finished product to contain 3-3 per cent. of mercury only.]

#### A Black Salicylate Mixture.

Why does the following mixture turn black on standing twenty-four or forty-eight hours?

Sodaæ salicyl.	..	..	..	..	..	5ij.
" bicarb.	..	..	..	..	..	3ij.
Tr. nuci vomicae	..	..	..	..	..	3ij.
Aquaæ chloroformi ad	..	..	..	..	..	3viii.

M. Ft. mist.

A. W. (2/42.)

[Salicylate mixtures are liable to change colour, especially in presence of free alkali and organic matter, such as, in this case, tinctor of nux vomica. See "The Art of Dispensing," page 132. The amount of impurity in the salicylate has much to do with the intensity of the colour. The natural salicylate is not affected in this way.]

#### LEGAL QUERIES.

ACKNOWLEDGMENTS OF BILLS.—Messrs. Fletcher, Fletcher & Stevenson lately asked the Board of Inland Revenue whether in acknowledging bills of exchange for sums amounting to 2*l.* or upwards the use of a receipt stamp is legally necessary. The reply is that such acknowledgments are liable to stamp duty as receipts.

2/41. *Nux Areca.*—An unregistered man must not be a partner in a chemist's business. There is nothing against his having an interest in the sale of drysaltaries, &c.

255/22. W. W. asks if he is infringing the laws of the General Post Office by supplying his customers with postage-stamps, not for the sake of profit, but simply to oblige them. He is. It is illegal for any person other than a Post Office employé to sell stamps except under the authority of a licence granted by the Board of Inland Revenue. The law on the subject is contained in 33 and 34 Vict. cap. 98, sections 5 to 13. The penalty for selling without a licence is, under section 7, 20*l.*

5/65. F. A. B.—It would be unlawful for an unregistered person to sell an arsenical preparation, either as a sheep-dip or as an insecticide, unless he could satisfy the court that the transaction should be regarded as a wholesale one. We think he could not. But the initiation of any prosecution against unregistered persons for selling poisonous is left with the Pharmaceutical Council.

5/8. *S. B.*—Your friend evidently was not "in business before August 1, 1868," and therefore cannot claim registration. If, however, he thinks he has any such claim let him give particulars of his career previous to that date to the Registrar, 17 Bloomsbury Square.

4/69 and 5/72. These correspondents write about unregistered persons who sell poisons, and respecting whom information has been given to the secretary of the Pharmaceutical Society. Yet (this correspondent is a veterinary surgeon, and not a registered chemist) wrote to the Council to say that an individual was continuing to sell scheduled poisons in face of their warning; would they prosecute if they produced evidence? The Council declined to interfere. *Lege Agere* gave information about a person who sold Kay's essence without putting his name and address on the space provided by the makers for that purpose. The reply was, the onus of proceedings for offences under sec. 17 is not thrown on the Pharmaceutical Society, but may be instituted by any individual, and, in the opinion of the Council, most properly by the local police authorities. This correspondent rightly assumes "that a chemist can sell any mixture containing poison without placing the name of the poison or the word poison on the bottle, &c., provided he dispenses such mixture himself and places his name and address on the bottle, &c., and enters the ingredients therein contained in a book and keeps a register of names and addresses of persons to whom it is sold. It matters little, as far as the Pharmacy Act is concerned, whether he places a medicine stamp on it or not." He adds:—"If a person not registered sold such a mixture (provided it was not patented under the great seal—see Alpe), he would be liable, under the 17th section, even though dispensed by a registered chemist. This is one of the advantages which a chemist possesses." Mr. Alpe's point is that he would be liable under the 15th section. He would be liable under the 17th section too.

6/10. *Soda Bibor.*—It is illegal for a chemist to employ an apprentice (under 18 years of age) in his shop for more than seventy-four hours in a week, including meal-times.

5/62. *Doubtful.*—A tenant from year to year is not bound to effect "substantial repairs," but he must keep the premises wind and water tight and do "ordinary repairs." He would have no right to alter the premises without the landlord's consent. We must remind you that questions of this kind are rather beyond our scope, and we could not advise you as to the remedy a landlord may have in a hypothetic case, as we do not know the circumstances.

7/1. *Benzoin.*—What salary the assistant is entitled to under the circumstances would depend on how he came to leave. The executors or executrix can carry on the business under the old style if they like, but the more usual form is "Executors of the late \_\_\_\_."

6/59. *S. T. (Hamburg).*—You cannot acquire the right to call yourself a chemist and druggist or to sell poisons in this country without passing certain examinations.

7/49. *Manager.*—As a registered chemist you can conduct a business on behalf of the executors of your late employer.

#### MISCELLANEOUS INQUIRIES.

Correspondents who have made inquiries regarding the following subjects will find the information in the numbers indicated.

4/68. *Semper.*—*Monthol Snuff.*—November 30, 1889, page 759.

3/40. *J. H. F.*—*Silvering Glass.*—Ordinary method, December 21, 1889, page 877; paste, April 27, 1889, page 578.

257/54. *A. C.* wishes to convey from London to his pharmacy in the Channel Islands 40 or 50 gallons of distilled water at regular intervals. If it were shipped in glass earthenware the freight would be too high, and a firm has suggested that he should use a new cask which has been soaked with water for a week or two. He asks us:—(1) Whether a cask would be likely to contaminate the water in a week? (this being the average time it would take to cross the Channel). (2) Whether keeping the water in a galvanised vessel, with a brass or iron tap, would be objectionable, the water to be used for dispensing?

To the first question we have to reply in the affirmative. Casks are made of oak, which contains tannin, and the water would take that up readily enough. It would be advisable to coat the interior of the cask with bitumen or some other substance which would not contaminate the water. A tin-lined cask would, however, be the best thing to use, and this would dispose of the necessity for storage-tanks. Pure distilled water may be kept in metallic vessels, but if the water is at all contaminated with nitrous acid or ammonia, as it sometimes is, this becomes decidedly objectionable.

257/2. *Fritz.*—(1) You will doubtless see the inconsistency of appealing to the trade for a formula for a certain preparation and on the very next page inserting an advertisement of that preparation by the maker. This would happen if we were to comply with your request. (2) Some shopkeepers call a saturated solution of oxalic acid "spirit of vitriol, for cleaning brasses."

2/29. *J. J. S.*—We know of no means whereby the Ph.D. degree can now be obtained except after three or four years' life and study at one or more German universities.

2/27. *Mag. Cit.*—You will find an interesting correspondence regarding *Violin Varnish* in the three issues beginning June 9, 1888. Here the amber-resin theory is fully discussed. See also the DIARY, page 260.

2/28. *Yorkshireman.*—In the *Practitioner* for March (Macmillan & Co., 1s. 6d.) you will find a paper on "Hypnotism" by Dr. A. T. Myers, which will suit your purpose.

2/30. *J. Greaves.*—Morton's veterinary works are, or were, published by Longmans & Co., but we are under the impression that the hook to which you refer is out of print.

2/40. *Students.*—See our last Educational number, September 21, page 411.

2/43. *S. M. Bookholes.*—A razor.

2/46. *Yorkshire.*—*Carbolic Jelly for Toothache.*—A one or two drachm bottle of this is generally given for 6d. Half fill the bottle with collodion, then pour in as much crystallised carbolic acid, previously liquefied by heat, and shake. A jelly is at once formed. A bit of this, the size of a pearl of barley, should be placed in the hollow tooth, previously dried out with absorbent cotton, and covered over with cotton.

3/80. *W. Smith.*—*To Bleach a Carved Ivory Card-case.*—Sponge it with solution of peroxide of hydrogen, and expose to the light. Repeat the process several times.

4/25. *Attraction.*—You appear to labour under a misapprehension regarding what "Lanoline" is. This is the term which is applied to one purified wool-fat only, viz., that manufactured by Benno Jaffé & Darmstaedter, and it is this which Mr. Helbing has referred to in his notes. This is purified by Liebreich's process. We have never had any difficulty in mixing lanoline with its own weight of water. (2) The

liquid paraffin referred to is a heavy oil of specific gravity 0.840, or thereabout. It is not a burning-oil. Your best plan is to use white vaseline instead of it, and the cerasin. You have evidently not consulted Mr. Helbing's previous paper. (3) To determine how much alcohol there is in temperance beer, take 10 oz. of it and distil 6 oz., dilute the distillate with water to 10 oz., and from the specific gravity judge the amount of alcohol or proof spirit present. The limit fixed by the Excise is 2 per cent. of proof spirit (*not* alcohol), but they do not prosecute for anything under 3 per cent. (4) We should be suspicious of a sample of castor-oil which congealed at 36° F. See Mr. Conroy's paper on the adulteration of the oil with cocoanut oil, in our issue of November 16, 1889, page 685. If the oil is free from granulated matter at the ordinary temperature it is not likely to be adulterated with cocoanut oil.

4/59. *Castor.*—See reply 251/74 in our last issue.

4/66. *H.*—There is no process for making water take up more sulphur than it is actually capable of doing by simply shaking a little precipitated sulphur with water. If you were more specific in stating what you require we might be able to give you more assistance.

4/67. *Viburnum.*—*Menthol Ointment*:

Menthol .. .. .. ..	1 drachm
Chloroform .. .. .. ..	1 "
Hard paraffin .. .. .. ..	2 "
Vaseline .. .. .. ..	6 "

Melt the paraffins and stir until of the thickness of a cream. Then add the menthol dissolved in the chloroform, and continue to stir for five minutes.

4/74. *Superna Sequor.*—There is nothing unusual about the prescription. The emulsion will not keep.

23/27. *W. T. W.*—Thirty grains is a perfectly safe dose of sulphonal to take. The dose is from 10 to 30 grains. Two tablespoonfuls have been taken, and although the man slept for two or three days he came out of it none the worse.

251/49. *Omicron.*—You will find good chemical information regarding *Manures* in Dr. A. B. Griffith's "Treatise," published by Whitaker & Co. We do not know of any small hook which gives particulars regarding the manufacture of horse manures. Consult Spon's *Encyclopaedia* for this matter.

253/63. *T. F. E.*—(1) *Stains of Hydrobromic Acid, Tannin, and Laudanum.*—The stains in the pocket-handkerchiefs and towels—we presume that is what you mean, for your writing is very indistinct—should be treated first with solution of ammonia, then wash with cold water, and finally treat with a weak solution of bleaching-powder and water. (2) *The Wet Compress as a Substitute for Poultices.*—The compress, as we stated in a recent article, is largely used in Germany. Various antiseptic solutions are employed, such as corrosive sublimate (1-1000), creolin (1-50), carbolic acid (1-40), &c. Boric acid water (1-25) is used for applications to the face. In different kinds of inflammation lint is simply soaked with one of the solutions and placed on the affected surface; precaution must be taken to see that the lint is sterilised, and it should be covered by some waterproof material, such as oiled silk. Over this, to increase the effect, ordinary cotton-wool is sometimes adjusted, and lastly the whole is secured by a bandage. This treatment is claimed to be aseptic, easily and conveniently applied without the aid of a fire (which poultices necessitate), cheap, and only requiring change once in twenty-four hours. Further, the elevated temperature is constant (which is not the case with poultices), and there is no difficulty or pain to the patient in removing it. In the treatment of cases of painful whitlow it is easy to secure

relief of pain by increasing for a time the proportion of antiseptic, say of carbolic acid, from 2 to 4 or 5 per cent. In angina, diphtheria, pleuritis, pneumonia, and the different bronchitic affections of young children, the throat and chest are covered with such a compress, simply made with cold water, over this oiled silk, and then layers of flannel, the whole forming the so-called Priessnitz dressing. These compresses also give excellent results in the treatment of pain in the stomach and intestines.

258/67. *Kompo* has some trouble in making *Composition Easence*. His formula is:—

Bayberry bark in powder .. .. ..	3 oz.
Pinus canadensis .. .. ..	1 $\frac{1}{2}$ "
Ginger .. .. ..	2 $\frac{1}{2}$ "
Cinnamon .. .. ..	1 "
Cloves .. .. ..	1 "
Capsicum .. .. ..	2 "
Glycerine .. .. ..	4 "
Rectified spirit .. .. ..	16 "
Water .. .. .. ..	20 "

He mixes the liquids and macerates the drugs in the mixture for seven days, then transfers to a percolator, sets aside the first percolate, and continues to percolate with water until the drugs are exhausted. This second percolate is to be evaporated to 16 fluid oz.

[As far as we can gather from our correspondent he mixes the liquids, and is troubled with (1) an increase of bulk, and (2) "a cloudy, dirty brown precipitate." We have no clear statement as to what the increase of bulk is. The second percolate should be evaporated to as much as will, with the first, make 2 pints of essence, and the clear character which "Kompo" is aiming at is obtained by adding carbonate of potash in the proportion of 1 or 2 grains to the ounce of the essence.]

1/17. *Stannous Chloride.*—You do not give your name, and must repeat your query according to our rules if you wish a reply.

1/66. *Iota.*—*Furniture Cream.*—Soft soap, 2 oz.; beeswax, 12 oz.; carbonate of potash, 2 oz.; water, 1 pint. Heat together until a perfectly white cream is formed, bring to the boil and strain, then add 3 pints of turpentine, and enough water to make 6 pints of cream. For furniture polish see November 3, 1888, p. 638, and the 1889 DIARY, under "Household."

#### Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

2/20. Formula for Dr. Garrod's guaiacum drops, as used in Somerset.

2/13. Small printing machines: where to get.

1/21. Formula for Long's specific—a wash for cattle.

5/71. Who supplies stereo blocks of animals for use in veterinary announcements?

6/1. Jackson's night-light floats; where obtainable?

7/20. Makers of boxes similar to those in public places to receive contributions.

#### Information Supplied.

Replying to 242/68, in re "Haarlein's Drops," I would suggest that "Haarlein" or "Dutch drops" is the article required.

YORKSHIRE. (3/1.)

"Rod-Cross Nurse."—The *Pictorial World* in its issue of May 21, 1885, gave a coloured supplement illustrating the costume of the "Rod-Cross nurses, which gives a better idea than any description could convey.

W. T. MIGNOT TUCKER (Glastonbury).

**PALATABLE TONIC LAXATIVE.****FERRIS & CO.'S PATENT****CASCARA**

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—, M.R.C.S.

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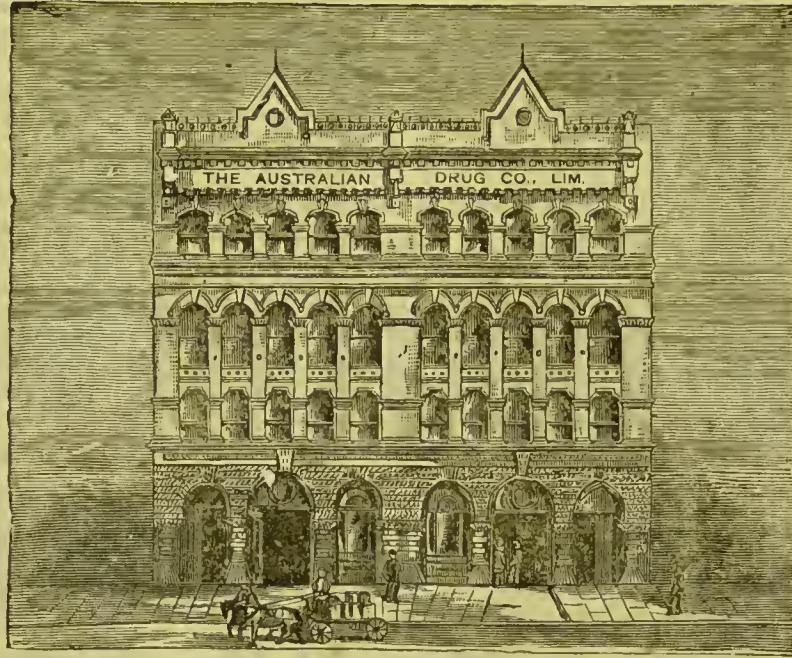
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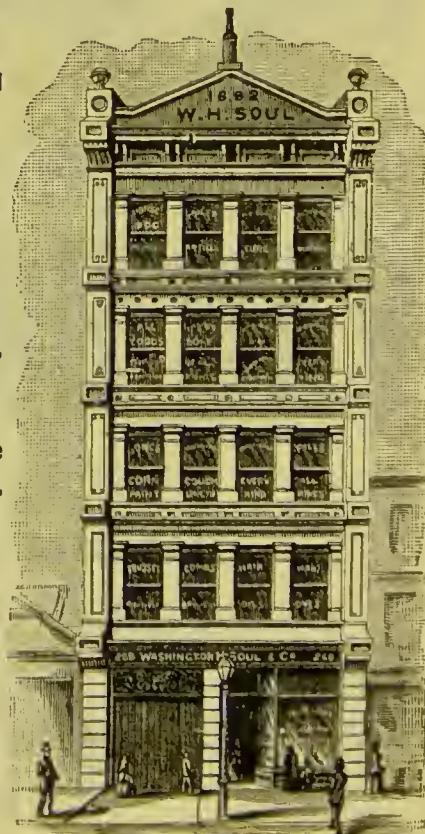
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Experimental Research as to the General Comparative Action of the Natural and Artificial Salicylic Acids, and their Salts of Sodium. Read in the Section of Pharmacology and Therapeutics at the Annual Meeting of the British Medical Association held in Leeds, August, 1889. By M. CHARTERIS, M.D., Professor of Therapeutics in the University of Glasgow, and W. MACLENNAN, M.B., C.M.

See BRITISH MEDICAL JOURNAL, Nov. 30, 1889.

The deductions from these experiments indicate that artificial salicylic acid and its salt of sodium are dangerous and, in large doses, fatal to animals, while salicin, natural salicylic acid, and its salts of sodium are not. That artificial salicylic acid contains an impurity or impurities, and until this or these can be extracted by the aid of chemistry the internal administration of it or its salts of sodium should be discountenanced. Large and repeated doses of the sodium salt are necessary in the treatment of acute rheumatism, and hence we may account for the restlessness, the confusion, and the delirium sometimes attendant on its use, which have been testified by clinical experience. It is more than probable, too, that the retarded convalescence occurring in some cases of acute rheumatism after the salicylate treatment is due to the great and protracted prostration which the impurity or impurities give rise to. It is to be remembered in connection with these symptoms that prescriptions of the salicylate of sodium are invariably made up, unless otherwise indicated, from the artificial and not the natural salt.

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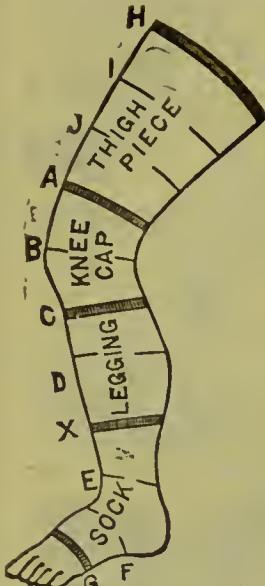
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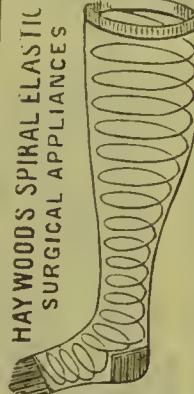
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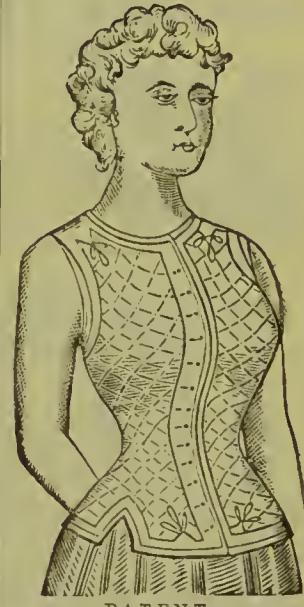
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PARIS, 1878.

Telegraphic Address:

"BOITLES LONDON."



LONDON, 1862.

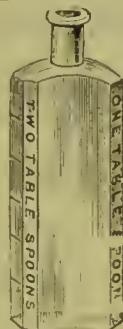
Telephone

No. 7503.



PARIS, 1875.

EXCELLENT  
QUALITY.  
EXTENSIVE  
VARIETY.  
PRICES LOW,



Dispensing.

FEEDING, PICKLE,  
DRUG, OIL,  
SAUCE, VINEGAR

BOTTLES.



VAN BOXES.

Mineral Water  
BOTTLES.

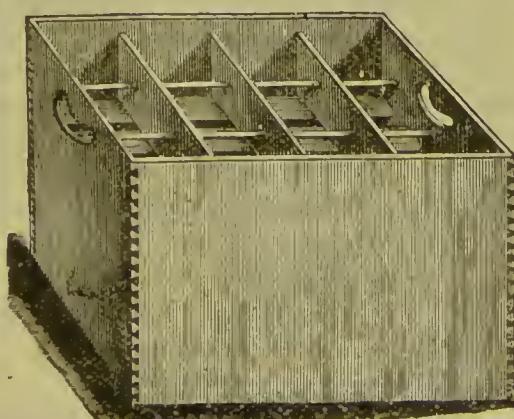
FIRST ORDER OF MERIT,  
MELBOURNE, 1888.



Feeding.

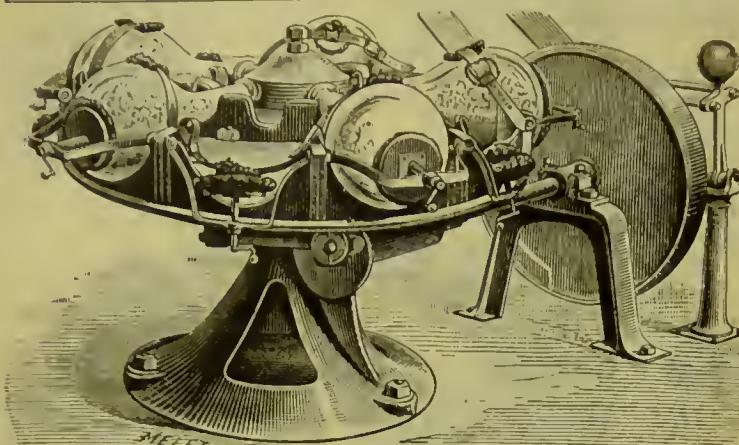
WINE, SPIRIT,  
BEER,  
CONFECTIONERY

BOTTLES.



CASES.

Mineral Water  
BOTTLES.



BEYER FRERES,  
16 & 18 RUE DE LORRAINE,  
PARIS.

2 GOLD MEDALS PARIS EXHIBITION, 1889.

### NEW AGITATING MACHINE

For macerating and exhausting raw materials in infusion with alcohol, producing 150,000 movements per day in each metal receptacle, with a minimum of force. A considerable economy of time, labour, and capital is obtained in infusing musk, amber, benjamin, civitte, iris, grains, powders, or pharmaceutical products treated with liquids or ether.

These machines are made for 10 or 15 bottles, each containing about 15 litres, as required.

### TO CHEMISTS AND DRUGGISTS.

AGENTS WANTED FOR THE SALE OF OLARK'S PATENT

### “SYPHON”

(REGISTERED TITLE)

### HYGIENIC CONDENSING GAS HEATING STOVES.

NO FLUE REQUIRED. ARE FREE FROM SMELL OR SMOKE.

All injurious vapours are reduced to harmless liquid inside the Stove, and passed out at foot into a tray provided for that purpose.

FOR USE IN HOSPITALS, SICK CHAMBERS, BEDROOMS, HALLS, CONSERVATORIES, CHURCHES, SCHOOLS, ETC.

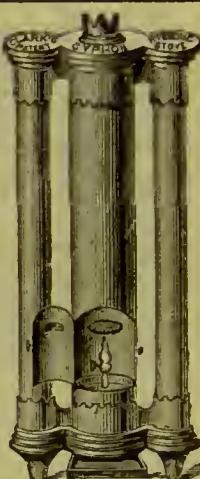
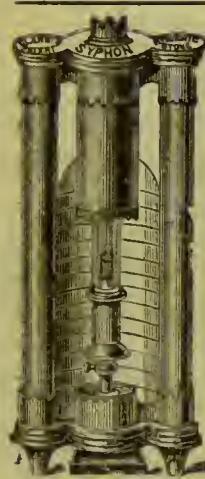
Specially suitable for patients suffering from Bronchial affections, as a moist atmosphere is obtainable when required.

FOR TERMS, PARTICULARS, AND PRICES, APPLY TO

S. CLARK & CO., Patentees & Makers, Syphon Works, Park St., Islington, LONDON, N.

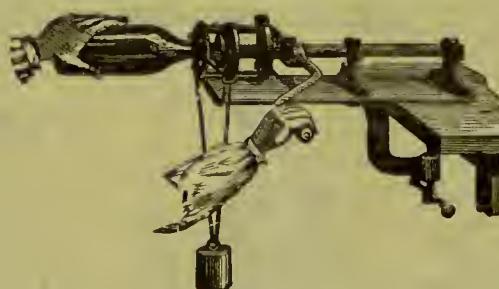
Telegraphic Address:—“SYPHON STOVES LONDON.”

Wholesale Agents:—Messrs. S. MAW, SON & THOMPSON, Aldersgate Street, London, E.C.



### NEW CAPSULING MACHINE

The only Machine  
which leaves no crease  
or pleat on the  
Capsule.



Can be fixed to any  
Counter.  
A single pull of the lever  
is sufficient  
to fix the Capsule.

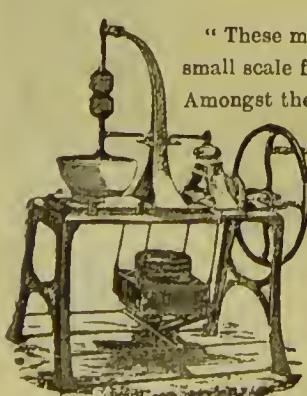
Patentee—C. MELIN, 37 Crutched Friars, LONDON, E.C.

### GOODALL'S PATENT GRINDING & LEVIGATING MACHINES.

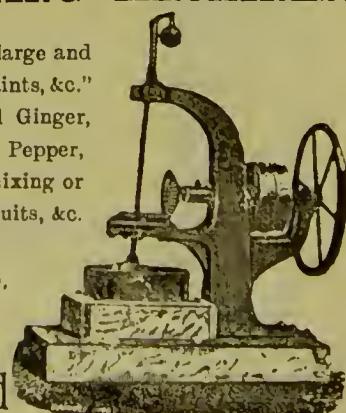
“These machines have for many years proved most serviceable on a large and small scale for Grinding, Levigating, and Mixing Powders, Pill Masses, Paints, &c.”  
Amongst the articles which are readily ground by it may be mentioned Ginger, Seeds, Salts of all kinds, Cream of Tartar, Sugar, Cocoa, Pepper, Spice, Jalap, Rhubarb, Gums, Aloes, Barks, &c.; and for mixing or kneading Lozenges, Pill Masses, Glaziers' Putty, Bread, Biscuits, &c.

ILLUSTRATED PRICE LIST, with full particulars, sent free.

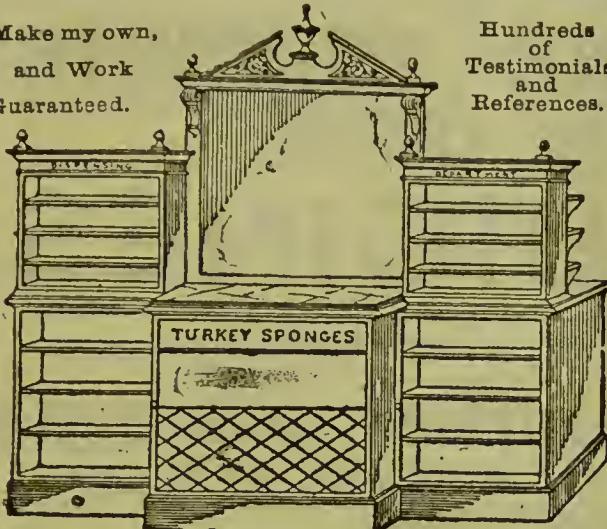
Prices from £8 10s. to £60.



E. F. GOODALL, Barton-under-Needwood



Make my own,  
and Work  
Guaranteed.



Hundreds  
of  
Testimonials  
and  
References.

The above represents a Plate-glass and Mahogany Dispensing Screen and Counter. The cases on each side of the marble slab over sponge case have silvered glass backs, and are fitted with movable shelves; the cases in front of counter are also fitted with movable shelves. The mahogany used is beautifully figured. At back under counter fitted with Drawers for Corks, Labels, Paper, &c., &c., and the back of screen with three shelves the entire length for Bottles.

6 ft. long, complete, £18: if Screen only, without Counter, £8 10s.

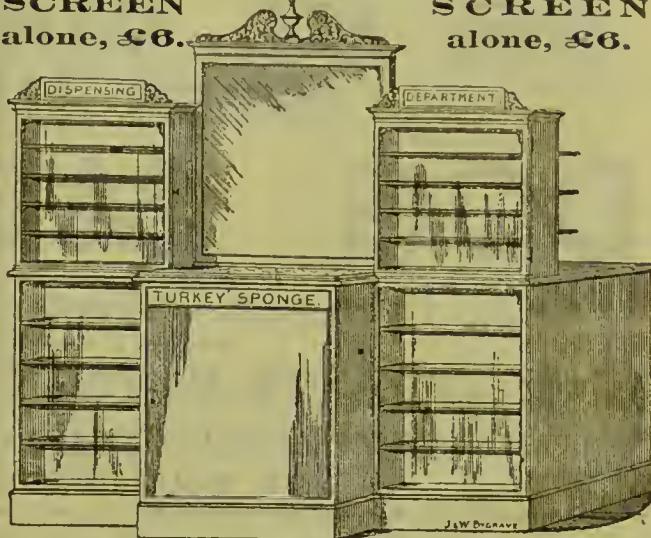
## ELKANAH NATALI

(Established 20 Years),

SHOW CASE MAKER AND SHOP FITTER,  
207 OLD STREET (Shoreditch End), LONDON.  
Workshops—HENSON STREET, E.C.  
(ONLY ADDRESSES).

No connection with any other house of the same name.  
PLEASE ADDRESS IN FULL.

SCREEN  
alone, £6.



SCREEN  
alone, £6.

The above represents a solid mahogany Dispensing Screen and glass-fronted Counter. The Screen has a glass case at each side, with plate-glass tablets and gold writing on top—"Dispensing Department"; and a plate-glass mirror with marble slab in centre, with mahogany ornaments) wood on top. Doors of screen are glazed with best 21-oz. glass, and inside the cases are polished black, with three long shelves right along the back for dispensing bottles. The Counter opens in front with three solid mahogany doors glazed with best 21-oz. glass, centre for sponges underneath. Counter at the back is fitted with a nest of deal drawers and shelves. If 6 feet long, and 5 feet high to top of cases, complete, £11 10s.

**J. & W. BYGRAVE.**  
SHOP FITTERS,  
111 Shepherdess Walk, City Road, LONDON, N.

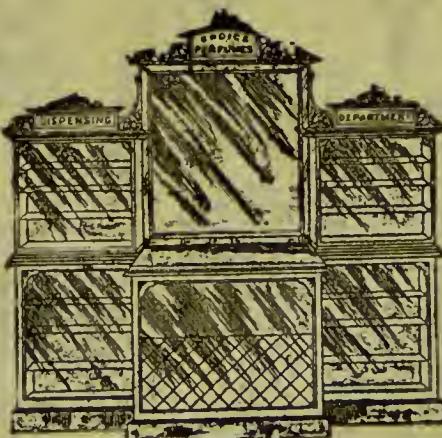
For further particulars please send Business Card.

## "THE CHEMIST" DISPENSING COUNTER.

6 feet long by 2 feet wide .. £24  
If the Dispensing Screen only, £12

This handsome Dispensing Counter is manufactured in Spanish mahogany, and of the best workmanship, so that it will stand any climate. The counter has a solid mahogany top, and plate-glass case front. The centre part fitted to take sponge. A mahogany screen on top, consisting of two plate-glass cases, with shelves inside, and large plate-glass mirror in the centre, and three glass tablets with gold writing in ornamental mahogany carved work. The back of screen fitted with small shelves and a glass poison cupboard. The inside of counter fitted with strong counter drawers, label and cork drawer, open shelves, &c.

**BOWLING & GOVIER**  
Manufacturers of High-class Shop Fittings,  
GUN ST., BRUSHFIELD ST.  
BISHOPSGATE, E.C.



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FOR  
**CHEMISTS' SHOP FITTINGS & SHOW CASES.**

**SHOPS FITTED FROM £50.**

DESIGNS AND ESTIMATES SUPPLIED IN TOWN OR COUNTRY.  
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Pamphlets on Canine Diseases for gratuitous distribution. Show Cards and Handbills Supplied.

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SPRATTS PATENT (AMERICA) LIMITED, 239 to 245 East 56th Street, NEW YORK, U.S.A.  
OR YOUR WHOLESALE HOUSE.

## BATTLE'S VERMIN KILLER. { Mice eat it readily, and Die on the spot.

TRADE MARK.



Has an immense sale, and wherever introduced never fails to give satisfaction.—Mice appear attracted to it as by magic, eat it readily, tumble over, and die on the spot. Rats usually die in their runs.—Parties troubled with Vermin may be cleared at once, either from Stacks, Houses, or Ships.

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From Mr. THOMAS COLTON, Agent for Selby.—A friend of mine purchased a Packet of your VERMIN KILLER last night, doubting its efficacy to-day he called in to say that he had found fifteen dead mice, and had only used part of a packet.—From Mr. EDWARD STURDY, Flemington Mills.—I duly received by post the Packet of your VERMIN KILLER, and found it as represented in your advertisement. It speedily destroyed all the mice in my granary. I enclose 2s. for two more Packets.—Leeds, November 6th, 1887.—I have tried BATTLE'S VERMIN KILLER, and have found it most effectual in clearing my premises of LARGE QUANTITIES OF RATS.—THOMAS B. CROSLAND.—Mr. Stead.

Sold in Packets, 8d., 6d., and 1s. each.

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LARGEST SALE IN THE WORLD.

AWARDED  
40  
PRIZE  
MEDALS.



REGISTERED SHAKE THE BOTTLE WELL BEFORE USING  
**DAY & SONS BLACK DRINK**  
OR COLIC & SCOUR MIXTURE  
DIRECTIONS FOR USE  
FOR Colic or Gripes in Horses and Cattle.  
FOR Dobility and Chills in all Stock.  
FOR Scour in Calves and Lambs.  
FOR Hoven or Blown Cattle and Sheep.  
FOR Shivering Fits in Horses.  
FOR Weakness after Lambing or Calving.

PRICE—10/- PER HALF-DOZEN, OR 19/- PER DOZ. BOTTLES



CAUTION  
REGISTERED  
DR FEVER AND DAY'S  
RED DRINK  
SCOURING DRINK  
TRADE MARK  
DIRECTIONS FOR USE  
FOR Fevers, Yellows, Indigestion, and Dulness  
FOR Red Water, Costiveness, and Mawbound.  
FOR Disordered System in Cattle.  
FOR Bad Cleansing after Calving.  
FOR Preventing Milk Fever and Inflammation.  
FOR Purifying and Increasing the Milk.

PRICE—12/- PER DOZEN PACKETS.



TRADE MARK SHAKE WELL BEFORE USING TRADE MARK  
**DAY & SONS PURIFIED DRIFFIELD OILS**  
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HEALING OILS  
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FOR Healing all Wounds in all Animals.  
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FOR Cracked Heels and Saddle Galls in Horses.  
FOR Sore Teats and Swollen Udders in Cows and Ewes.  
FOR Dressing and Anointing in Lambing and Calving.  
FOR Every Horse-keeper, Farmer, and Shepherd.

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**ALTERNATIVE POWDER**  
FOR HORSES  
DAY'S  
FOR HORSES  
STANDS UNRIVALLED  
FOR THE FOLLOWING AILMENTS OF HORSES.  
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FOR Heat-lumps, Itching, and Sourvy Skin.  
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IN CANISTERS. PRICE—3/6, 7/-, 12/-, AND 21/-.

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# CARBOLIC POWDER, £6 TON.

1-ton lots and upwards.

**CARBOLIC PINK POWDER**, 5/-, 7/6, and 10/- per ewt., in bags or casks.**WHITE CARBOLIC POWDER**, 10%, 15%, and 20%, equally cheap.**HANDSOME LARGE DECORATED BLACK AND GOLD TIN BOXES**,Holding 1½ lb. (usual 1/- size), 4/6 doz. Ditto, **LARGE SIZE** (usual 1/6 size), holding about double quantity, 6/- doz.**PALE CARBOLIC ACID**, 99 per cent. (No. 5), and **CHLORIDE OF LIME** below market prices.**SANITARY FLUID** or **CREOSOL** (to be used with 100 parts of water, making a *milky fluid*), half usual prices.*All goods delivered free in London or suburbs, or to rail or docks.* THE CHEAPEST HOUSE IN THE TRADE. [2]**HAMILTON & CO., HIGH STREET, WANDSWORTH, LONDON, S.W.****COLTHURST & HARDING,**

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LONDON—Manufactory: Alpha Works, Millwall E. City Office: 16 Fish Street Hill, E.C. Telegrams: "Alpha Brand London."

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**THE CHEMICAL EXTRACT.**

For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, swellings, and relaxed tendons in Horses. For paining after calving and lambing, and for swollen udders and sore feet.

2s. 6d. per Bottle; ½-dozen Box, 7s. 6d.

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Celebrated for inflammatory disorders, such as fevers, pleurisy, foot-and-mouth complaints, yellowish, scrofula, and red-water. Also for difficult calving and lambing. Admirably adapted for cleansing and checking feverish symptoms in Cows and Ewes after a bad time of parturition.

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Unmatched for colic or gripes and debility in Horses, for colds, chills, shivering fits, flux and diarrhoea in Cattle, Calves, and Sheep. For Ewes weakly after lambing and blown Cattle and Sheep, its effects are marvellous.

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Used as a laxative in uncontrollable spasmodic pains and violent bowel complaints. Invaluable for parturition in Mares, Cows, and Ewes.

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LIBERAL DISCOUNT TO FOREIGN BUYERS.

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Pure Grain Spirit B.P., 56 o.p., 18/5 per gallon.  
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CASH WITH ORDER.

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18/3 18/9  
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FOR METHYLATED SPIRIT.

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Jars, 2-gallon, 2/8; 3-gallon, 3/; 4-gallon, 4/.  
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PRICES.

61 o.p. 2/2 per gall. in casks

2½ per cent.

64 o.p. 2/3 " "

TINS EXTRA.

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WE ALSO TURN OVER THE VARIOUS  
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WE INVITE  
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ON FINE SHIRTING, 16 IN. WIDE.  
6s. per Dozen net cash.

JOHN QUILLIAM & CO., Plaster Works, Manchester.  
Cowburn Street, (1)

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**Dunn's** (Healthful, Useful.)  
Certificate of Analysis on each tin. **Fruit-Salt**  
Manufactured by W. G. DUNN & CO. **Baking Powder**  
21 Mincing Lane, E.C. "THE COOK'S BEST FRIEND."  
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Maker of the MERMAID IMPRESSION COMPOSITION for Dentists' use. 3s. per lb., post free.

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QUOTATIONS FREE ON BOARD HAMBURG AND OTHER PORTS.

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BY SANFORD'S RAT POISON.

"I have found 145 rats killed in my farm building by it."—C. Wilson Offord. "It is the most certain remedy I have ever tried. Little pellets, about the size of a pea, are put in the rat holes or in their runs. I destroyed over 200 rats from one dressing with it."—C. Cook, Grange Farm, Ellesmere, Salop. It is, without doubt, the best ever introduced. Price 6d., 1s., 2s., and 3s., of Chemists.

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MANUFACTURERS OF

PLAISTER SKINS and  
WHITE SPLIT SKINS for Capping,  
WHOLESALE AND FOR EXPORTATION.

For ASTHMA, CONSUMPTION, COUGHS, COLDS, BRONCHITIS, THROAT AFFECTIONS, SHORTNESS of BREATH, and all DISORDERS of the CHEST



Give immediate relief.  
Prepared only by DASILVA & CO., 26 Bridge Lane, Fleet Street, LONDON.  
Sold by all Druggists at 1/-, 2/-, 4/-, 8/-, and 1/- per box.

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90. " " " 60 " .....	2/9 "	207B. " " small size .....	2/3 "
92. " " " 30 " .....	1/11 "	208. Vegetable Ivory, " " .....	4/9 "
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201, 201B, 201s.



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161, 210, 211.

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